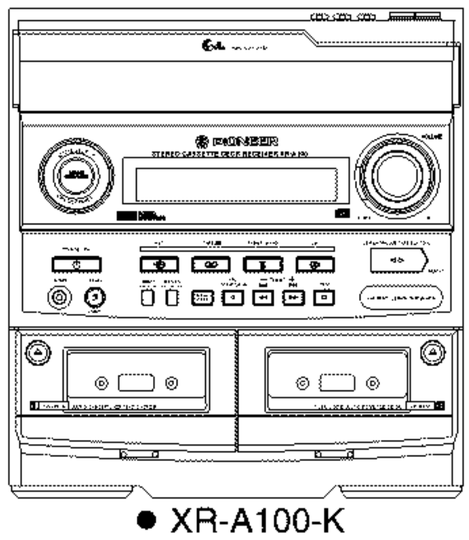
Service Manual

PIONEER®

The Art of Entertainment



● XR-A100-K

ORDER NO.
RRV1883

STEREO CD CASSETTE DECK RECEIVER

XR-A200
XR-A100-K

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	Remarks
	XR-A200	XR-A100-K		
KCXJ	○	○	AC120V	
KCXJN	—	○	AC120V	
KUXJ	—	○	AC120V	
KUXJN	—	○	AC120V	

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PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER ELECTRONIC (EUROPE) N.V. Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 501 Orchard Road, #10-00 Lane Crawford Place, Singapore 0923

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

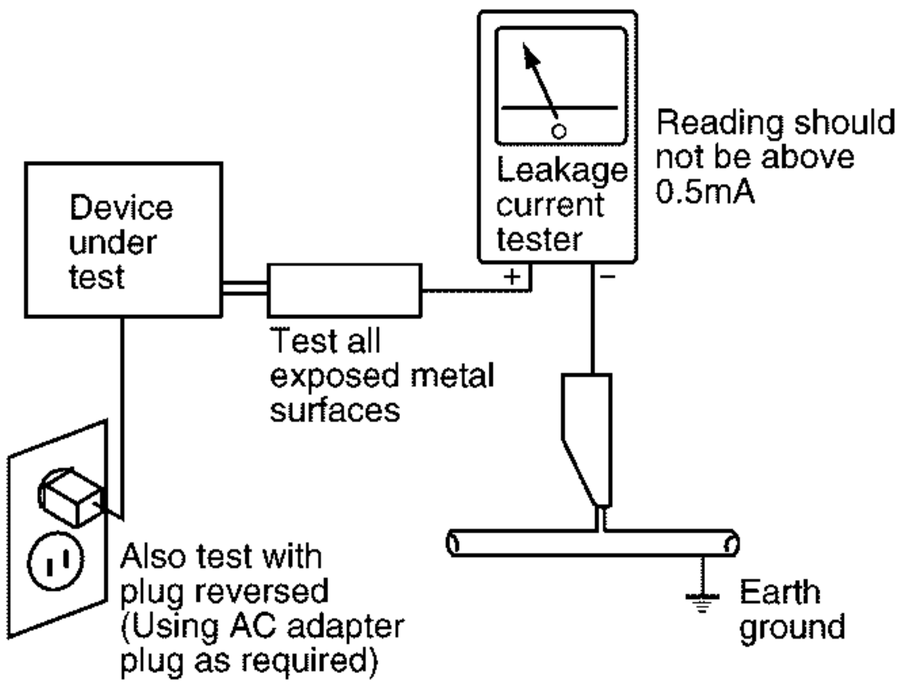
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Device under test
Leakage current tester
Reading should not be above 0.5mA
+
–
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

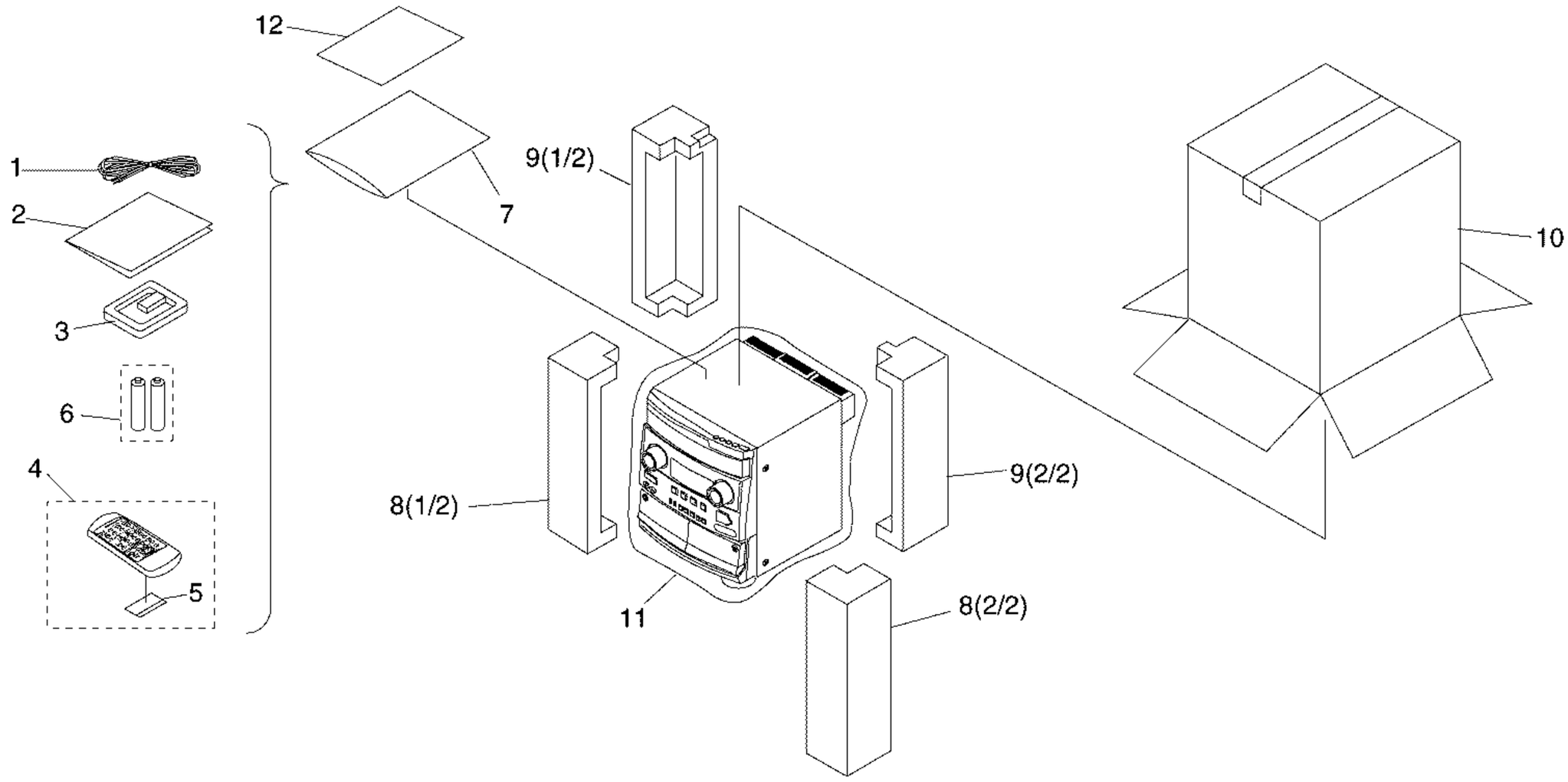
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

NOTES: ● **Parts marked by "NSP" and ⊗ can not be supplied.**
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on the product are used for disassembly.*

2.1 PACKING



(1) PACKING PARTS LIST

Mark	No.	Description	Part No.
	1	FM Antenna	ADH7004
	2	Operating Instructions (English/French/Spanish)	XRE3005
	3	AM Loop Antenna	XTB3001
	4	Remote Control Unit (CU-XR040)	XZN3002
	5	Battery Cover	AZA7204
NSP	6	Dry Cell Battery (R6P, AA)	VEM-013
	7	Polyethylene Bag (0.03 × 230 × 340)	Z21-038
	8	F Protector	XHA3001
	9	R Protector	XHA3002
	10	Packing Case	See Contrast table (2)
	11	Packing Sheet	AHG7003
NSP	12	Warranty Card	See Contrast table (2)

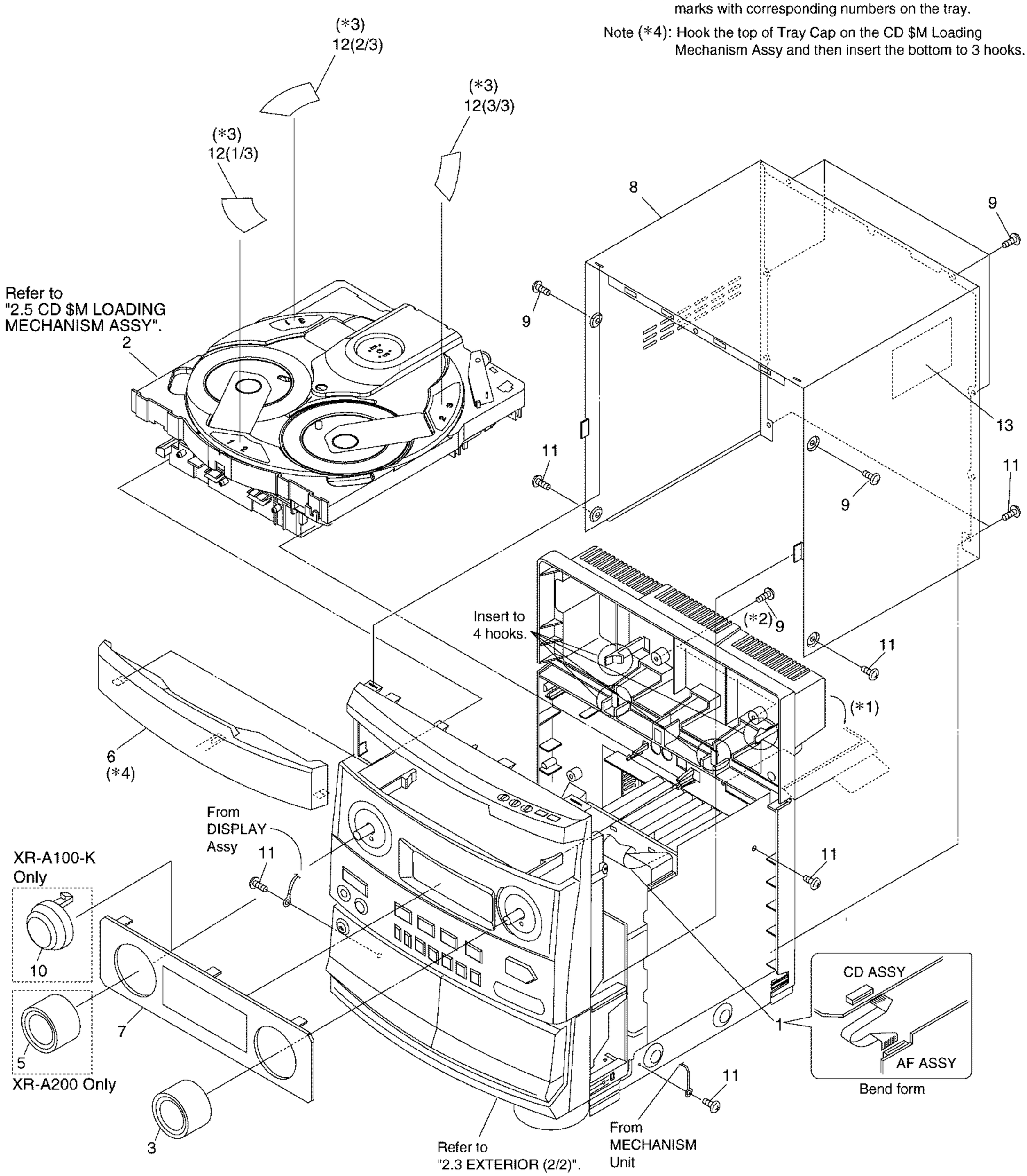
(2) CONTRAST TABLE

XR-A200/KCXJ, XR-A100-K/KCXJ, KCXJN, KUXJ and KUXJN are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.					Remarks
			XR-A200 /KCXJ	XR-A100-K /KCXJ	XR-A100-K /KCXJN	XR-A100-K /KUXJ	XR-A100-K /KUXJN	
	10	Packing Case	XHD3025	XHD3008	XHD3027	XHD3008	XHD3027	
NSP	12	Warranty Card	ARY1075	ARY1075	ARY1075	ARY1051	ARY1051	

2.2 EXTERIOR (1/2)

Note (*1): Bend the Rear Cover when insert Mechanism Assy.
Note (*2): There is no ▼ mark on the Rear Cover for the Bonnet Case installation screws.
Note (*3): Attach the stickers according to the engraved marks with corresponding numbers on the tray.
Note (*4): Hook the top of Tray Cap on the CD $M Loading Mechanism Assy and then insert the bottom to 3 hooks.



(1) EXTERIOR (1/2) PARTS LIST

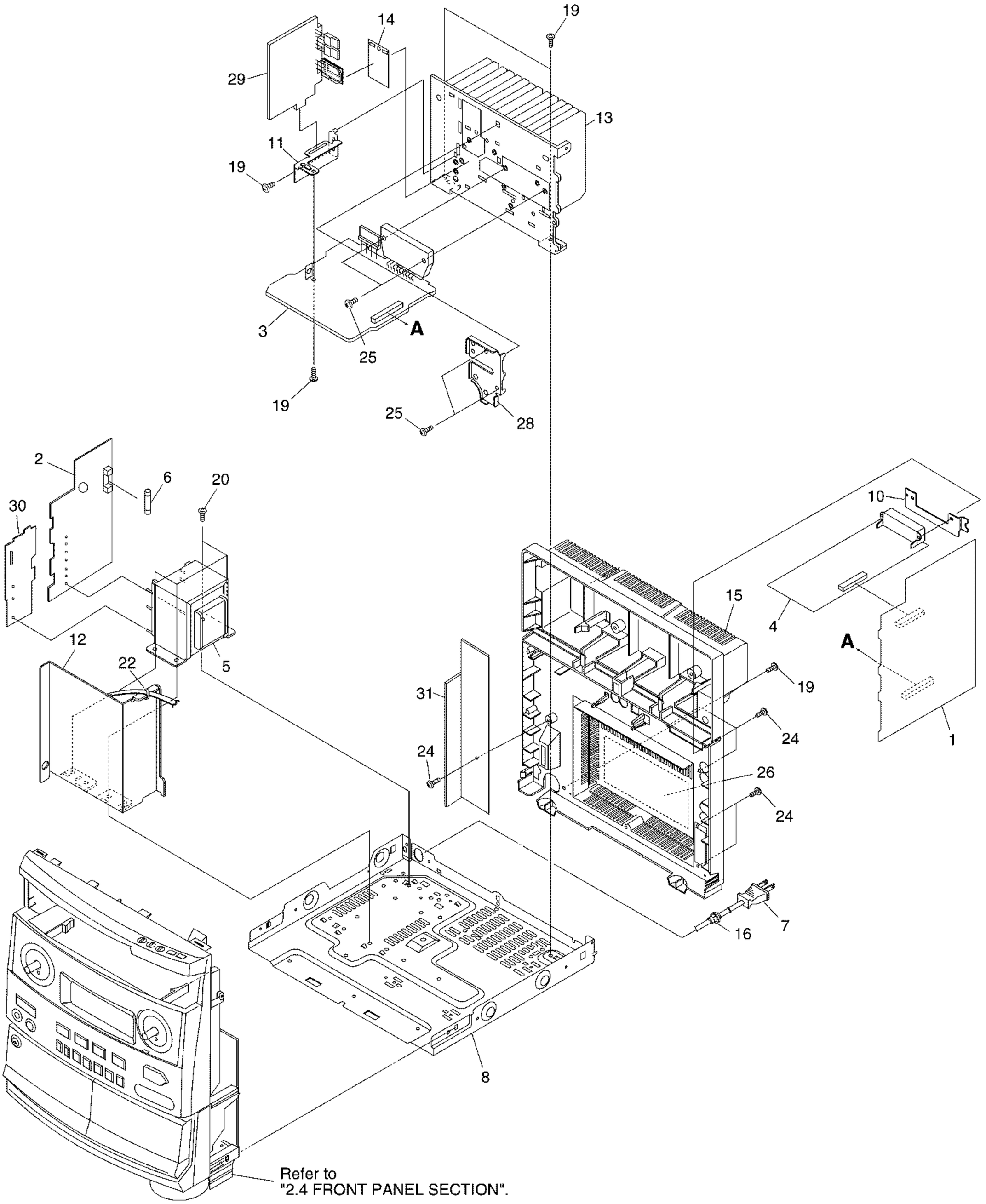
Mark	No.	Description	Part No.
	1	20P F.F.C/30V	ADD7041
NSP	2	CD $M Loading Mechanism Assy	XXA3002
	3	Volume Knob	XAA3003
	4	•••••	
	5	S.C Knob	See Contrast table (2)
	6	Tray Cap	See Contrast table (2)
	7	Display Panel	See Contrast table (2)
	8	Bonnet Case	See Contrast table (2)
	9	Screw	BPZ30P100FZK
	10	S.C Button	See Contrast table (2)
	11	Screw	VBZ30P080FZK
	12	Disc Label	XAX3046
NSP	13	ICP & 65 Label	AAX7521

(2) CONTRAST TABLE

XR-A200/KCXJ, XR-A100-K/KCXJ, KCXJN, KUXJ and KUXJN are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.					Remarks
			XR-A200 /KCXJ	XR-A100-K /KCXJ	XR-A100-K /KCXJN	XR-A100-K /KUXJ	XR-A100-K /KUXJN	
	5	S.C Knob	XAA3004	Not used	Not used	Not used	Not used	
	6	Tray Cap	XAK3009	XAK3016	XAK3016	XAK3016	XAK3016	
	7	Display Panel	XAK3006	XAK3005	XAK3005	XAK3005	XAK3005	
	8	Bonnet Case	XZN3001	XZN3005	XZN3005	XZN3005	XZN3005	
	10	S.C Button	Not used	XAD3003	XAD3003	XAD3003	XAD3003	

2.3 EXTERIOR (2/2)



(1) EXTERIOR (2/2) PARTS LIST

Mark	No.	Description	Part No.
⊗	1	AF Assy	See Contrast table (2)
⊗	2	TRANS Assy	XWZ3010
⊗	3	POWER Assy	XWZ3011
⊗	4	FM/AM TUNER MODULE	AXQ7061
⚠	5	T1 Power Transformer (AC120V)	XTS3004
⚠	6	FU1 Fuse (3.15A)	REK1081
⚠	7	AC Power Cord	PDG1057
NSP	8	Chassis	ANA7051
	9	•••••	
	10	GND Plate	ANG7106
	11	Bracket B	ANG7107
	12	Shield Plate	ANG7132
	13	Heat Sink	ANH7063
	14	Mica Sheet	AEE7015
	15	Rear Cover	AMC7011
	16	Strain Relief	CM-22C
	17	•••••	
	18	•••••	
	19	Screw	VBZ30P080FZK
	20	Screw	ABA7031
	21	•••••	
	22	Binder	ZCA-SKB90BK
	23	•••••	
	24	Screw	BPZ30P100FZK
	25	Screw	BBZ30P160FMC
NSP	26	Name Label	See Contrast table (2)
	27	•••••	
	28	Bracket C	ANG7127
⊗	29	POWER Assy 2	XWZ3012
⊗	30	TRANS 2 Assy	XWZ3013
	31	PVC Barrier	AEC7074

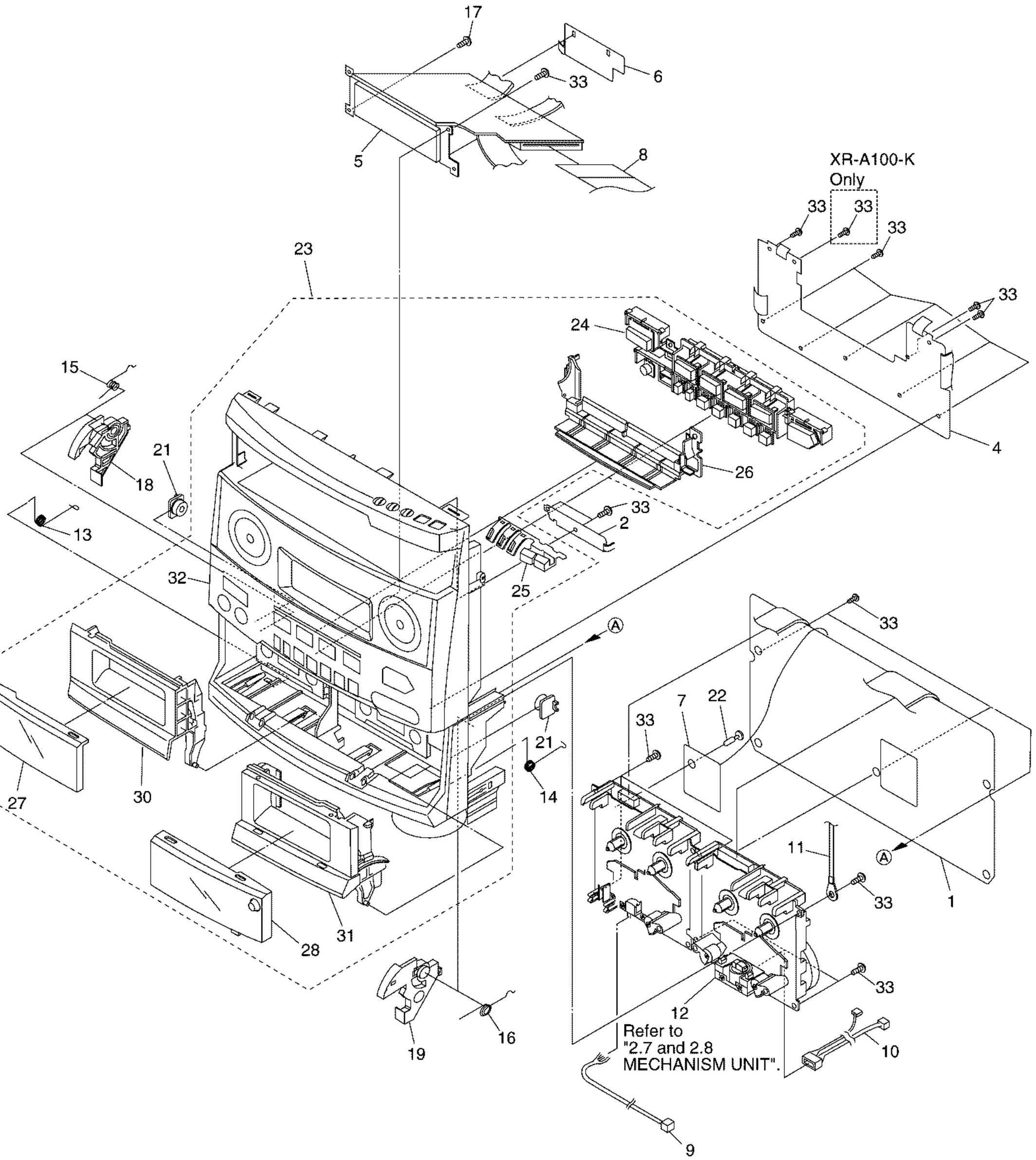
Note: The GND Plate (No.10) will tend to come off once it is removed, as the plate is fit with light pressure. If you have to remove the plate, secure it onto the Rear Cover with adhesive tape for reinstallation.

(2) CONTRAST TABLE

XR-A200/KCXJ, XR-A100-K/KCXJ, KCXJN, KUXJ and KUXJN are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.					Remarks
			XR-A200 /KCXJ	XR-A100-K /KCXJ	XR-A100-K /KCXJN	XR-A100-K /KUXJ	XR-A100-K /KUXJN	
⊗	1	AF Assy	XWM3024	XWM3004	XWM3004	XWM3004	XWM3004	
NSP	26	Name Label	XAX3047	XAX3009	XAX3052	XAX3009	XAX3052	

2.4 FRONT PANEL SECTION



(1) FRONT PANEL SECTION PARTS LIST

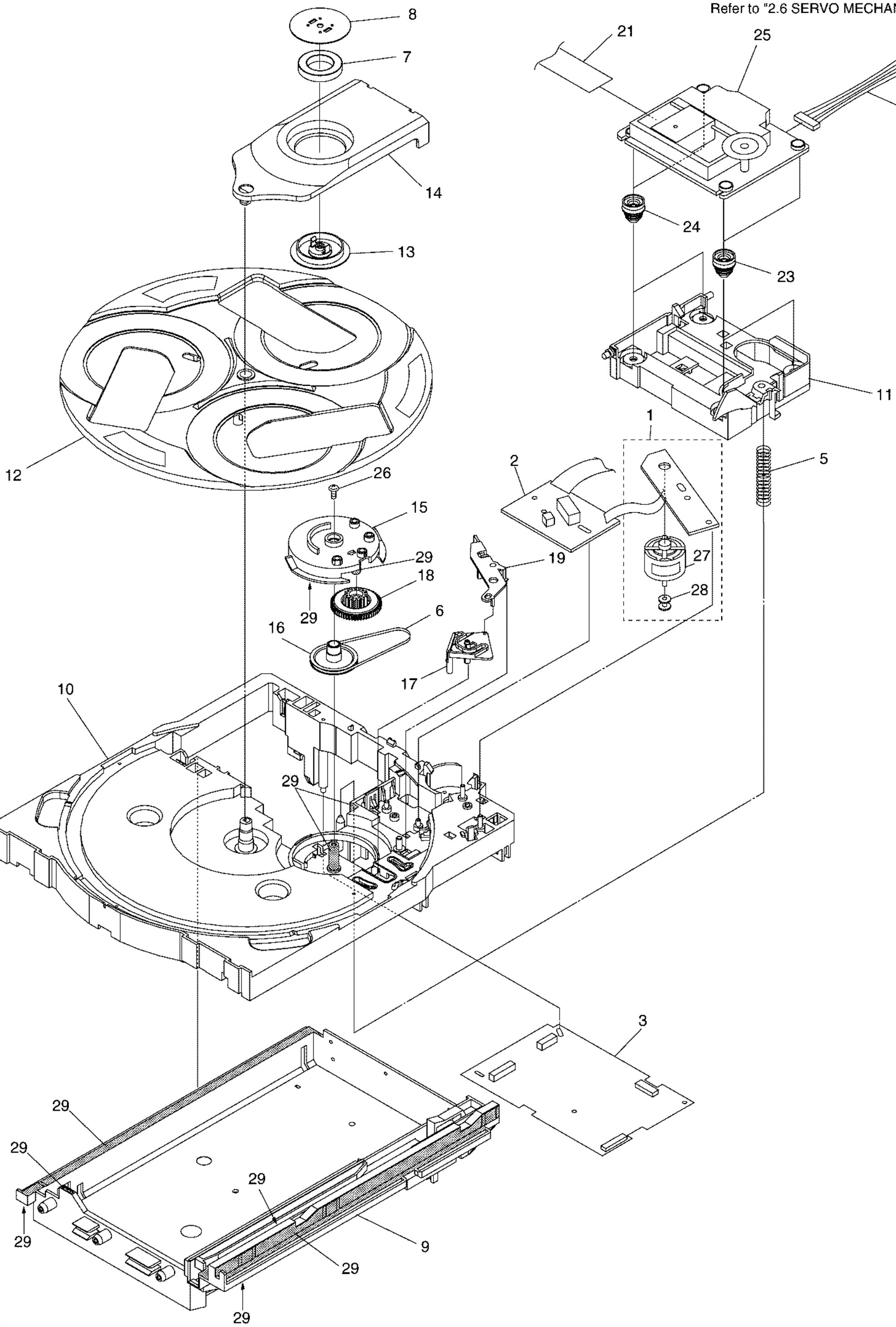
Mark	No.	Description	Part No.
⊗	1	DECK Assy	XWZ3007
⊗	2	CD SW Assy	XWZ3004
	3	•••••	
⊗	4	DISPLAY Assy	See Contrast table (2)
⊗	5	LCD Assy	See Contrast table (2)
⊗	6	LAMP Assy	See Contrast table (2)
NSP	7	SHIELD Assy	XWZ3005
	8	Flexible Cable 40P20	ADD7059
	9	Connector Assy 3P	ADE7011
	10	Connector Assy 5P	ADE7012
NSP	11	Cord With Plug	DE015VE0
	12	Mechanism Unit	XYM3001
	13	Door Spring L	ABH7128
	14	Door Spring R	ABH7129
	15	Latch Spring L	ABH7130
	16	Latch Spring R	ABH7131
	17	Screw	BPZ30P100FZK
	18	Latch Mold L	XMR3001
	19	Latch Mold R	XMR3002
	20	•••••	
	21	Damper Assy	AXA7052
	22	Push Rivet	AEC7071
NSP	23	Front Panel Assy	See Contrast table (2)
	24	Function Button	See Contrast table (2)
	25	CD Button	XAD3002
	26	LT Conductor	XAK3001
	27	Door Window L	XAK3014
	28	Door Window R	XAK3015
	29	•••••	
	30	Door Pocket L	See Contrast table (2)
	31	Door Pocket R	See Contrast table (2)
	32	Front Panel	See Contrast table (2)
	33	Screw	BPZ30P080FMC

(2) CONTRAST TABLE

XR-A200/KCXJ, XR-A100-K/KCXJ, KCXJN, KUXJ and KUXJN are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.					Remarks
			XR-A200 /KCXJ	XR-A100-K /KCXJ	XR-A100-K /KCXJN	XR-A100-K /KUXJ	XR-A100-K /KUXJN	
⊗	4	DISPLAY Assy	XWZ3039	XWZ3014	XWZ3014	XWZ3014	XWZ3014	
⊗	5	LCD Assy	XWZ3040	XWZ3015	XWZ3015	XWZ3015	XWZ3015	
⊗	6	LAMP Assy	XWZ3024	XWZ3008	XWZ3008	XWZ3008	XWZ3008	
NSP	23	Front Panel Assy	XXG3005	XXG3008	XXG3008	XXG3008	XXG3008	
	24	Function Button	XAD3001	XAD3004	XAD3004	XAD3004	XAD3004	
	30	Door Pocket L	XAN3001	XAN3003	XAN3003	XAN3003	XAN3003	
	31	Door Pocket R	XAN3002	XAN3004	XAN3004	XAN3004	XAN3004	
	32	Front Panel	XMB3005	XMB3008	XMB3008	XMB3008	XMB3008	

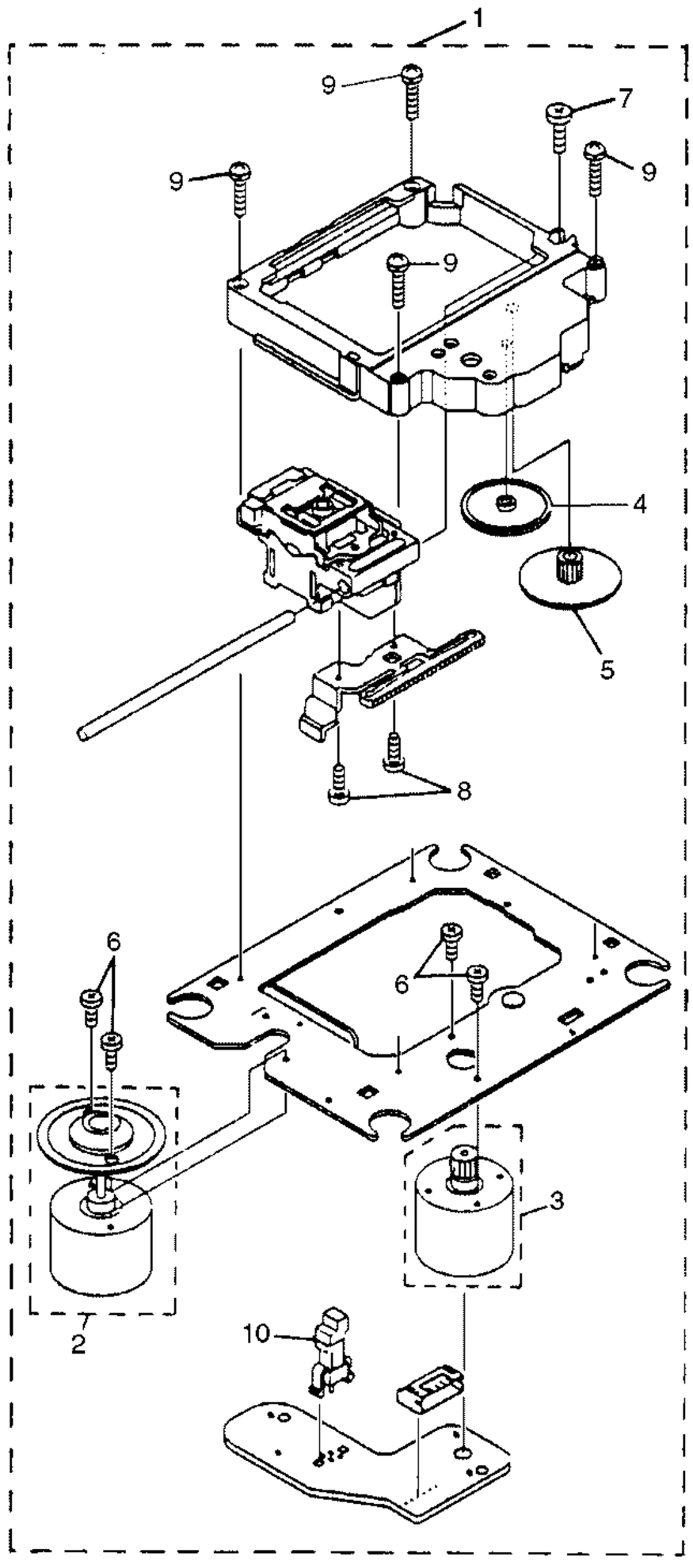
2.5 CD $M LOADING MECHANISM ASSY



● CD $M LOADING MECHANISM ASSY PARTS LIST

Mark	No.	Description	Part No.
⊗	1	MOTOR Assy	AWZ8428
NSP	2	SW Assy	AWZ8429
⊗	3	CD Assy	AWZ8427
	4	•••••	
	5	Servo Spring	ABH7126
	6	Belt	AEB7072
	7	Clamp Magnet	AMF7001
	8	Yoke	ANB7067
	9	Mecha Base	ANW7087
	10	Loading Tray	ANW7088
	11	Servo Base	ANW7089
	12	Rotary Tray	ANW7113
	13	Clamper	ANW7091
	14	Clamper Holder	ANW7092
	15	Main Cam	ANW7093
	16	Gear Pully	ANW7094
	17	Lock Lever	ANW7095
	18	Planet Gear	ANW7096
	19	Actuater	ANW7097
	20	•••••	
	21	15P F.F.C/30V	ADD7038
	22	Connector Assy (6P)	ADE7010
	23	Float Rubber A	AEB7063
	24	Float Rubber B	AEB7066
	25	Servo Mechanism Assy	AXA7039
	26	Screw	IPZ30P080FMC
	27	Carriage Motor	VXM1033
	28	Motor Pulley	PNW1634
	29	Ha Narl	GEM1016

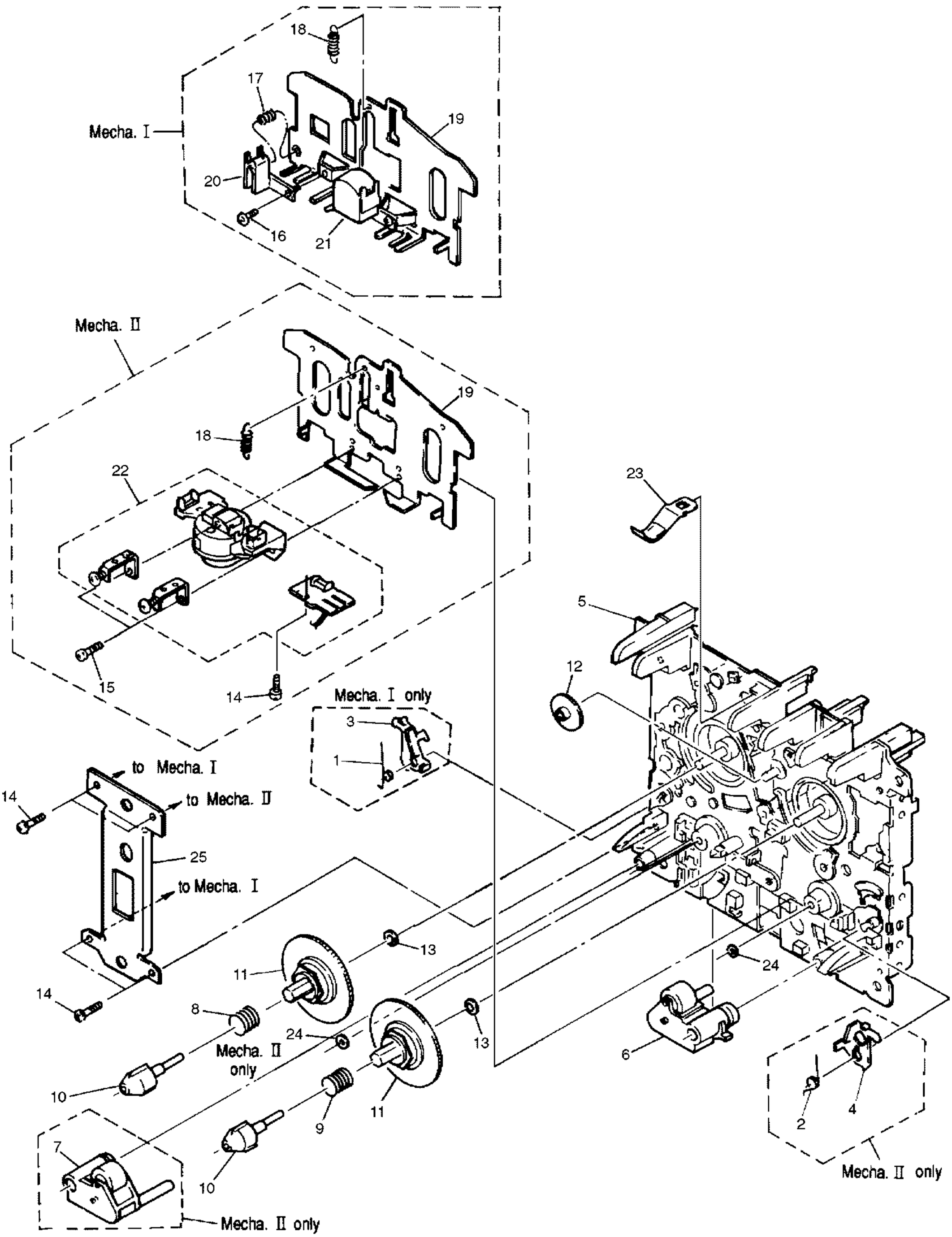
2.6 SERVO MECHANISM ASSY



● SERVO MECHANISM ASSY PARTS LIST

Mark	No.	Description	Part No.
	1	Servo Mechanism	AXA7039
	2	SPINDLE MOTOR Assy	AEA7009
	3	SLEAD MOTOR Assy	AEA7010
	4	Gear A	AEA7013
	5	Gear B	AEA7014
	6	Screw	AEA7015
	7	Screw	AEA7016
	8	Screw	AEA7017
	9	Screw	AEA7018
	10	Leaf Switch	AEA7011

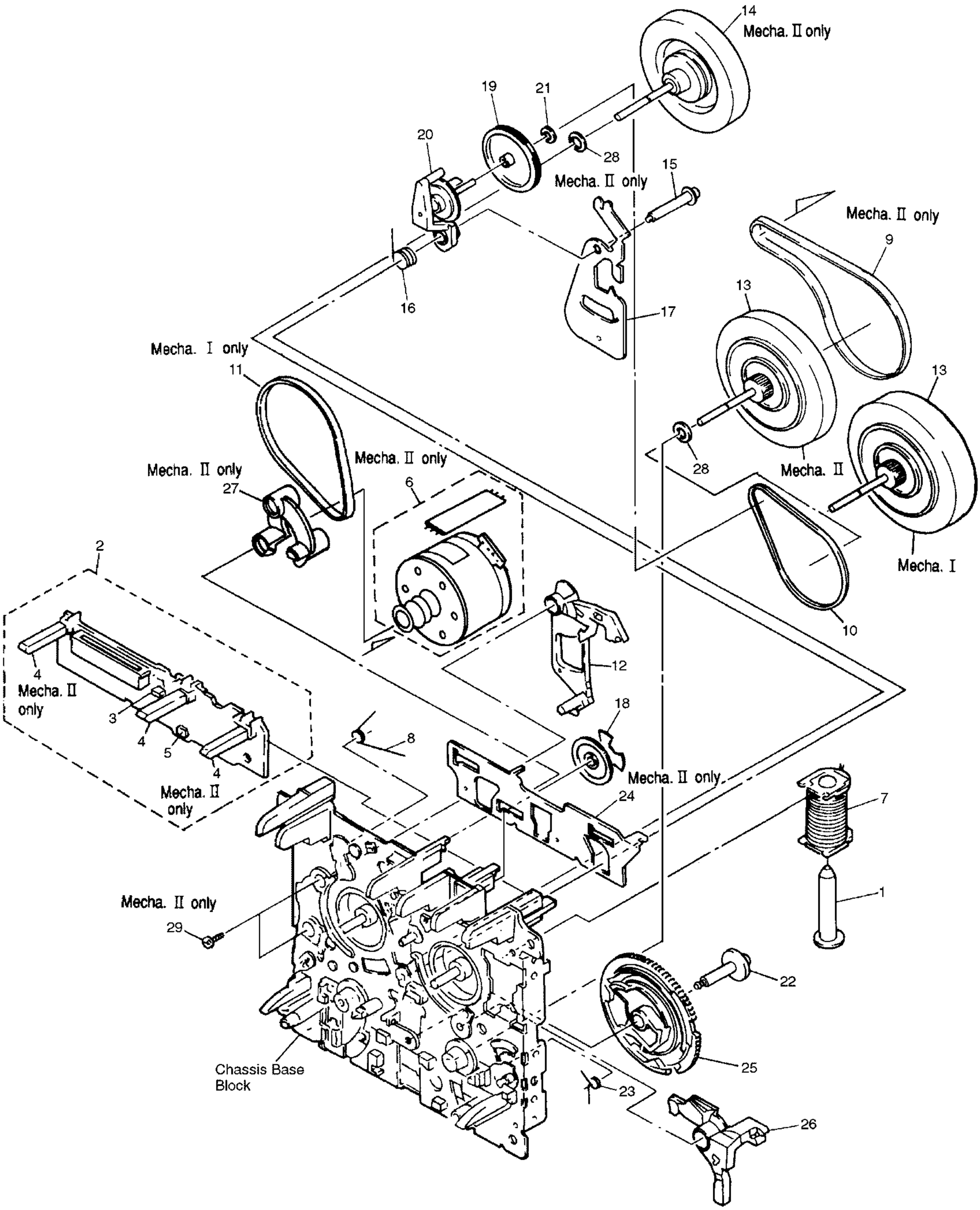
2.7 MECHANISM UNIT (FRONT SECTION)



• MECHANISM UNIT (FRONT SECTION) PARTS LIST

Mark	No.	Description	Part No.
	1	SP Interlock L (Mecha. I only)	RBH1385
	2	SP Interlock R (Mecha. II only)	RBH1386
	3	Arm Interlock L (Mecha. I only)	RNE1780
	4	Arm Interlock R (Mecha. II only)	RNE1781
	5	Chassis Base BLK (Mecha. I)	RXA1627
	5	Chassis Base BLK (Mecha. II)	RXA1626
	6	Roller Pinch BLK R (Mecha. I)	RXA1630
	6	Roller Pinch BLK R (Mecha. II)	RXA1628
	7	Roller Pinch BLK L (Mecha. II only)	RXA1629
	8	SP Reel (L)	RBH1388
	9	SP Reel (R)	RBH1389
	10	Reel Feather	RNK2072
	11	Reel Base	RNK2073
	12	Play Gear (A)	RNK2074
	13	Washer	WA41D065D025
	14	Screw	PCZ20P040FMC
	15	Screw	PMZ20P060FMC
	16	Screw M3 × 10	RBA1031
	17	Spring	RBH1076
	18	Spring HB	RBH1390
	19	Head Base (Mecha. I)	RNE1906
	19	Head Base (Mecha. II)	RNE1783
	20	Tape Guide (Mecha. I only)	RNK2077
	21	R/P Head (Mecha. I only)	XPB3001
	22	Plate HD BLK (Mecha. II only)	RXA1746
	23	SP Cassette	RNE1786
	24	Washer	WT15D040D050
	25	Mecha Bracket	RNE1907

2.8 MECHANISM UNIT (REAR SECTION)

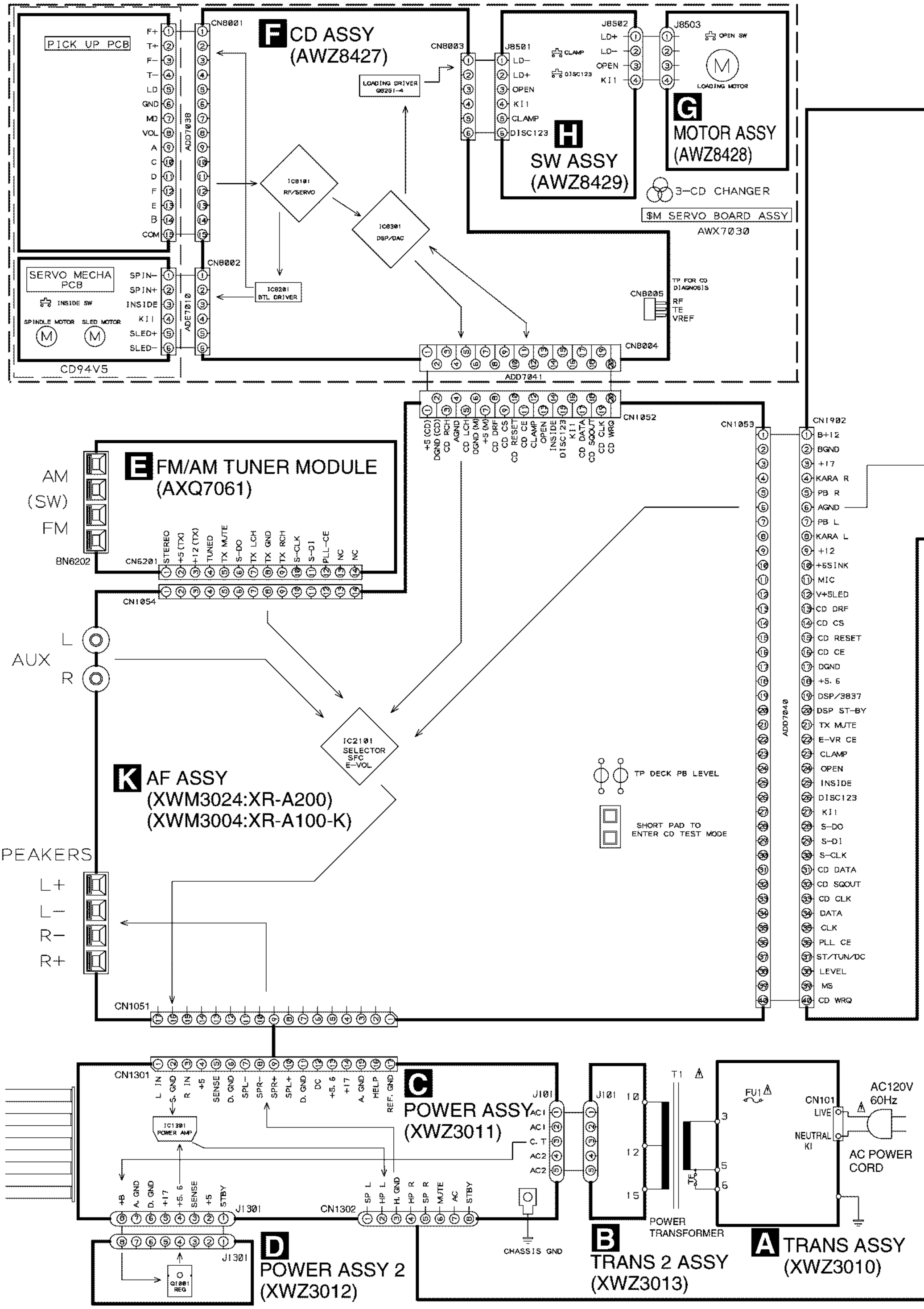


• MECHANISM UNIT (REAR SECTION) PARTS LIST

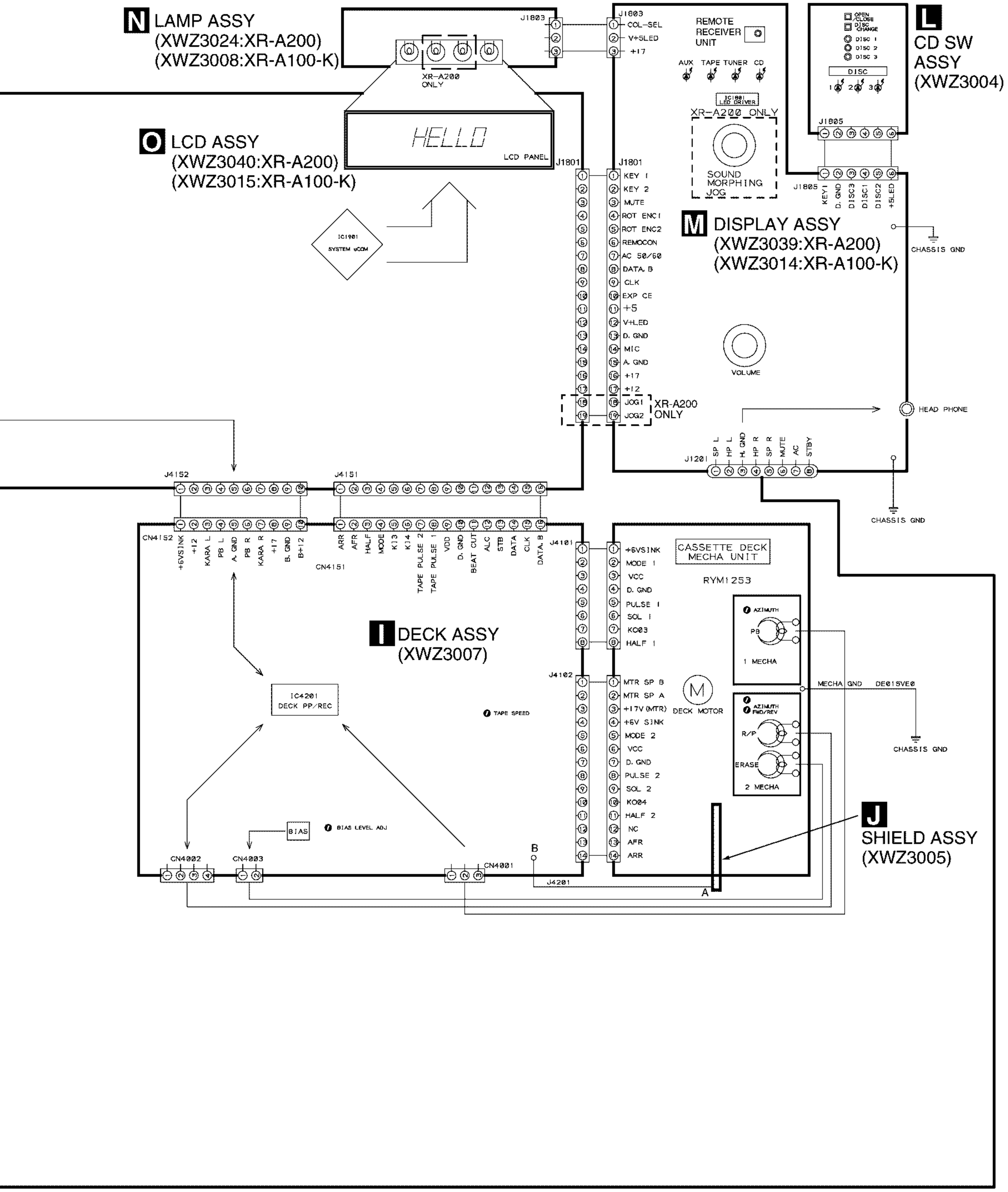
Mark	No.	Description	Part No.
	1	Plunger	PLA1288
	2	PCB Control BLK (Mecha. I)	RXA1742
	2	PCB Control BLK (Mecha. II)	RXA1743
	3	Switch	RSG1018
	4	SPLF	RSN1023
	5	Photo-Transistor	SPI33534FG
	6	MTR Main BLK (Mecha. II only)	RXM1086
	7	Solenoid BLK	XXP3001
	8	SP Brake	RBH1387
	9	Main Belt (Mecha. II only)	REB1157
	10	F/R Belt	REB1254
	11	Joint Belt (Mecha. I only)	REB1307
	12	Lever Brake	RNK2071
	13	Clutch ASSY BLK (Mecha. I)	RXA1744
	13	Clutch ASSY BLK (Mecha. II)	RXA1745
	14	ASSY F/W (Mecha. II only)	RXA1769
	15	Screw 2-6 × 3.5	RBA1120
	16	Cam SP	RBH1393
	17	Lever F/R	RNE1782
	18	FF Gear (A)	RNK2075
	19	F/R Pulley	RNK2076
	20	Clutch ASSY BLK	RXA1632
	21	Washer	WA17D040D025
	22	Screw 2-9 × 3.5	RBA1121
	23	SP Arm Play (Mecha. I)	RBH1391
	23	SP Arm Play (Mecha. II)	RBH1392
	24	Plate Slide (Mecha. II only)	RNE1785
	25	Cam Gear	RNK2078
	26	Arm Play	RNK2079
	27	Motor Spacer (Mecha. II only)	RNK2244
	28	Washer	WA26D045D025
	29	Screw	PMA26P140FMC

3. SCHEMATIC DIAGRAM

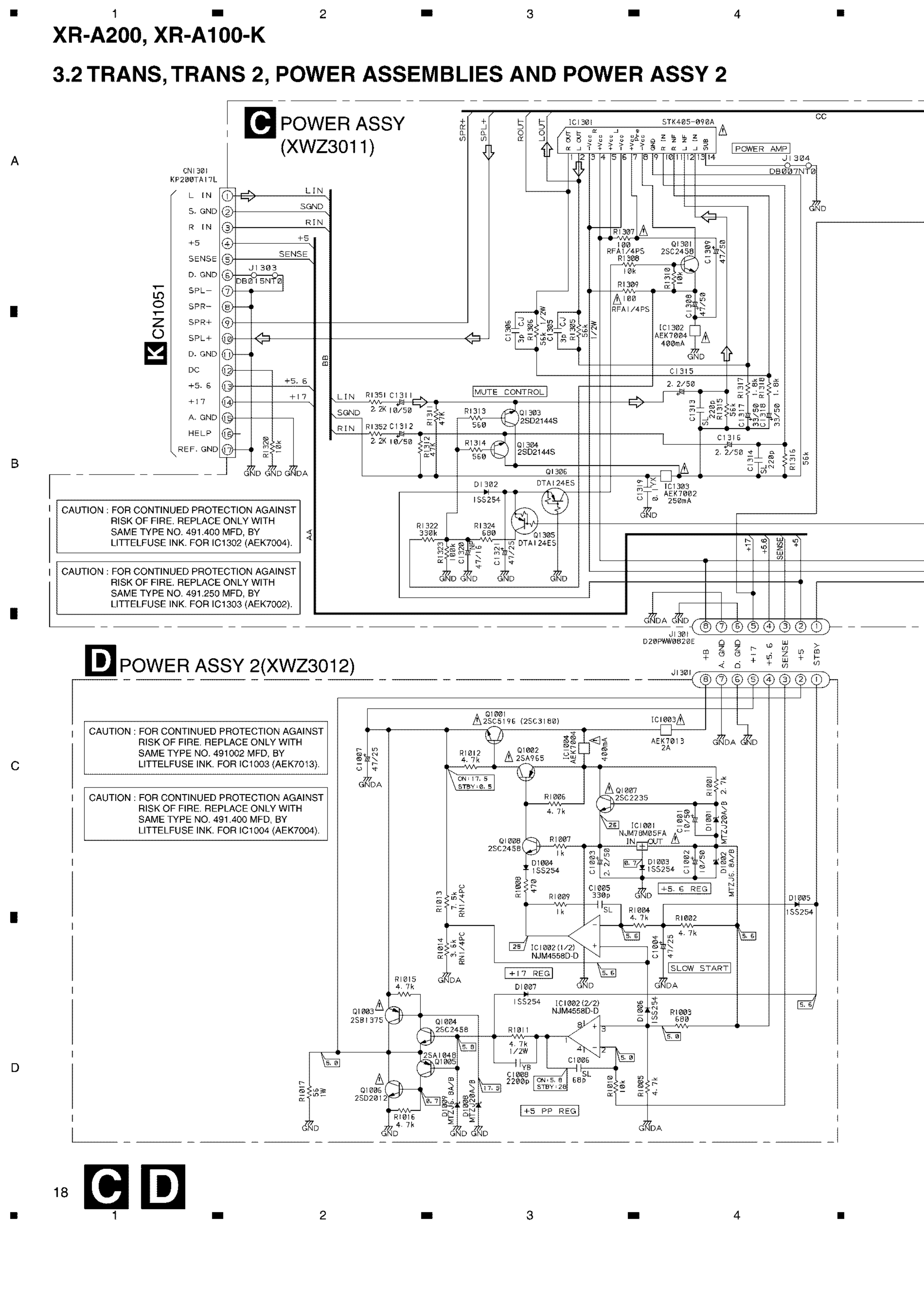
3.1 OVERALL CONNECTION DIAGRAM

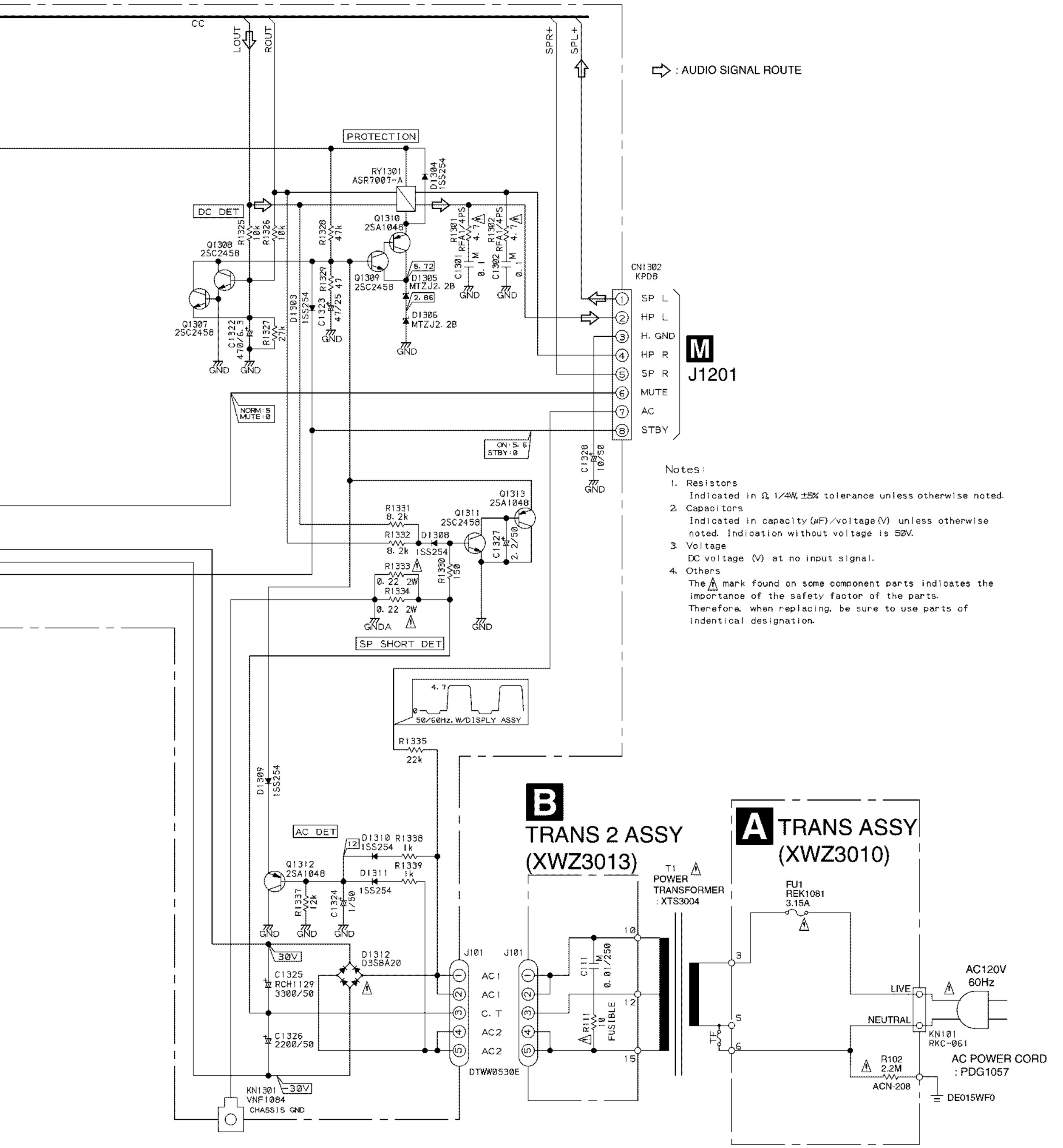


Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".



3.2 TRANS, TRANS 2, POWER ASSEMBLIES AND POWER ASSY 2





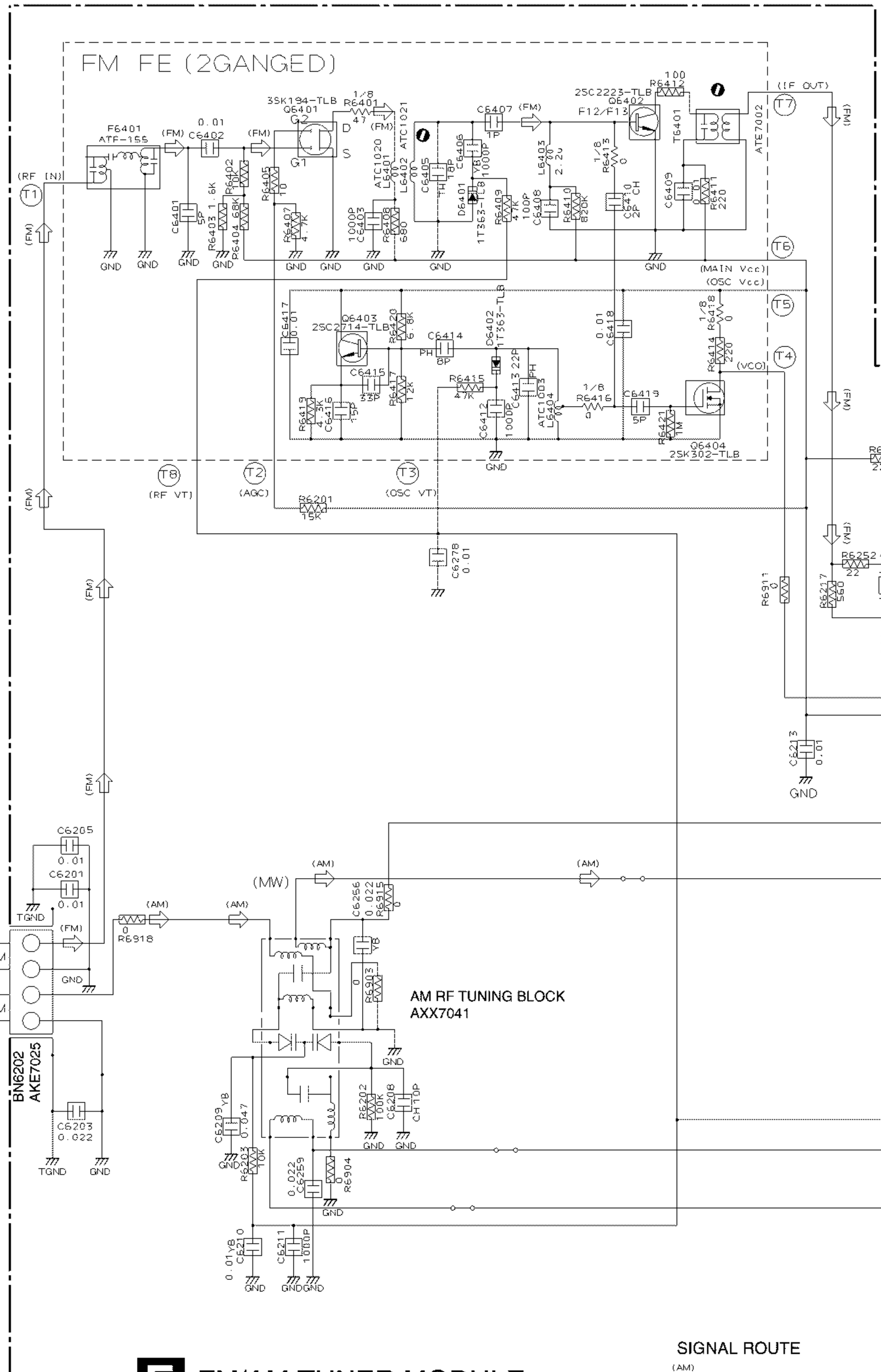
Notes:

1. Resistors
   Indicated in Ω, 1/4W, ±5% tolerance unless otherwise noted.
2. Capacitors
   Indicated in capacity (μF)/voltage (V) unless otherwise noted. Indication without voltage is 50V.
3. Voltage
   DC voltage (V) at no input signal.
4. Others
   The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of indentical designation.

• NOTE FOR FUSE REPLACEMENT

CAUTION -FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

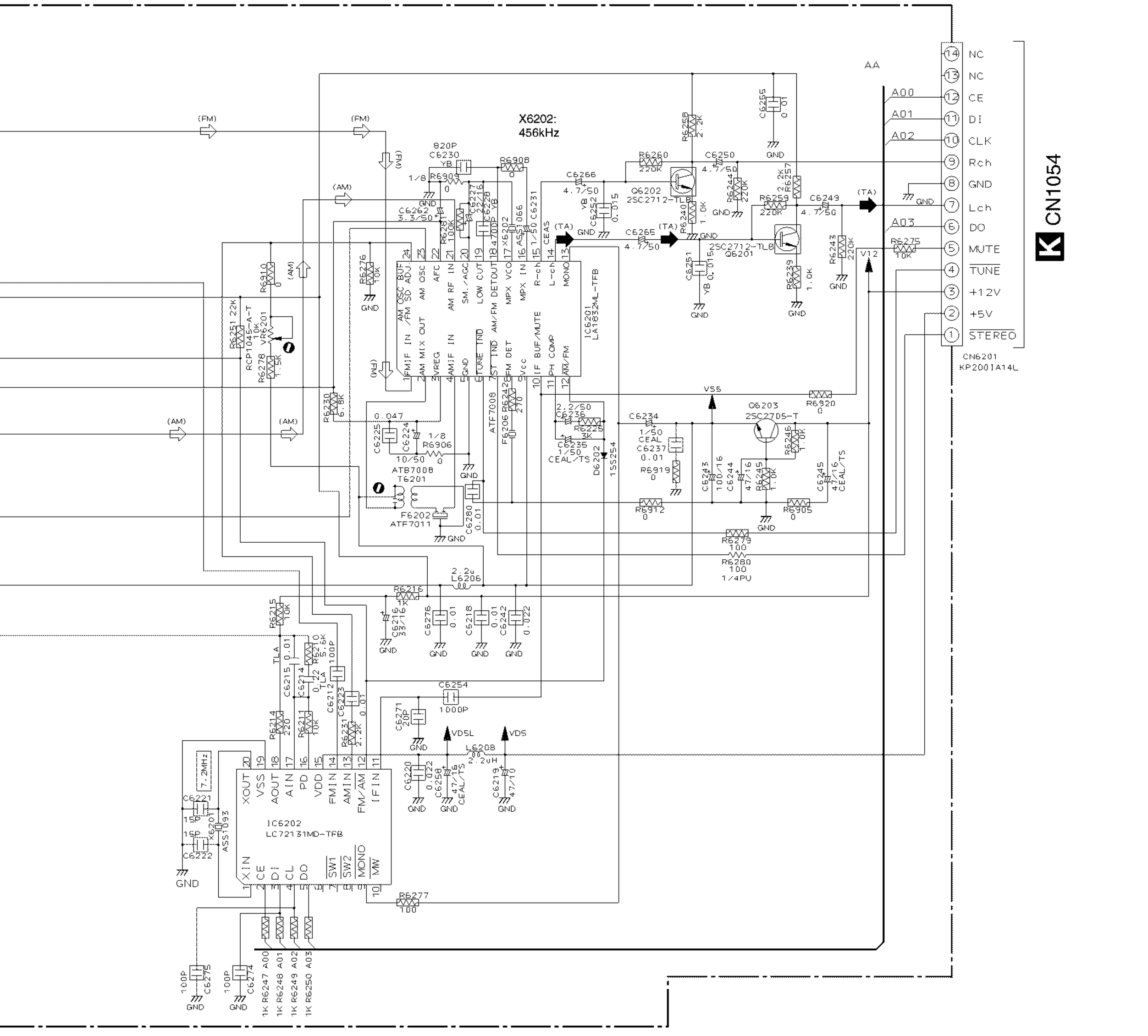
3.3 FM/AM TUNER MODULE



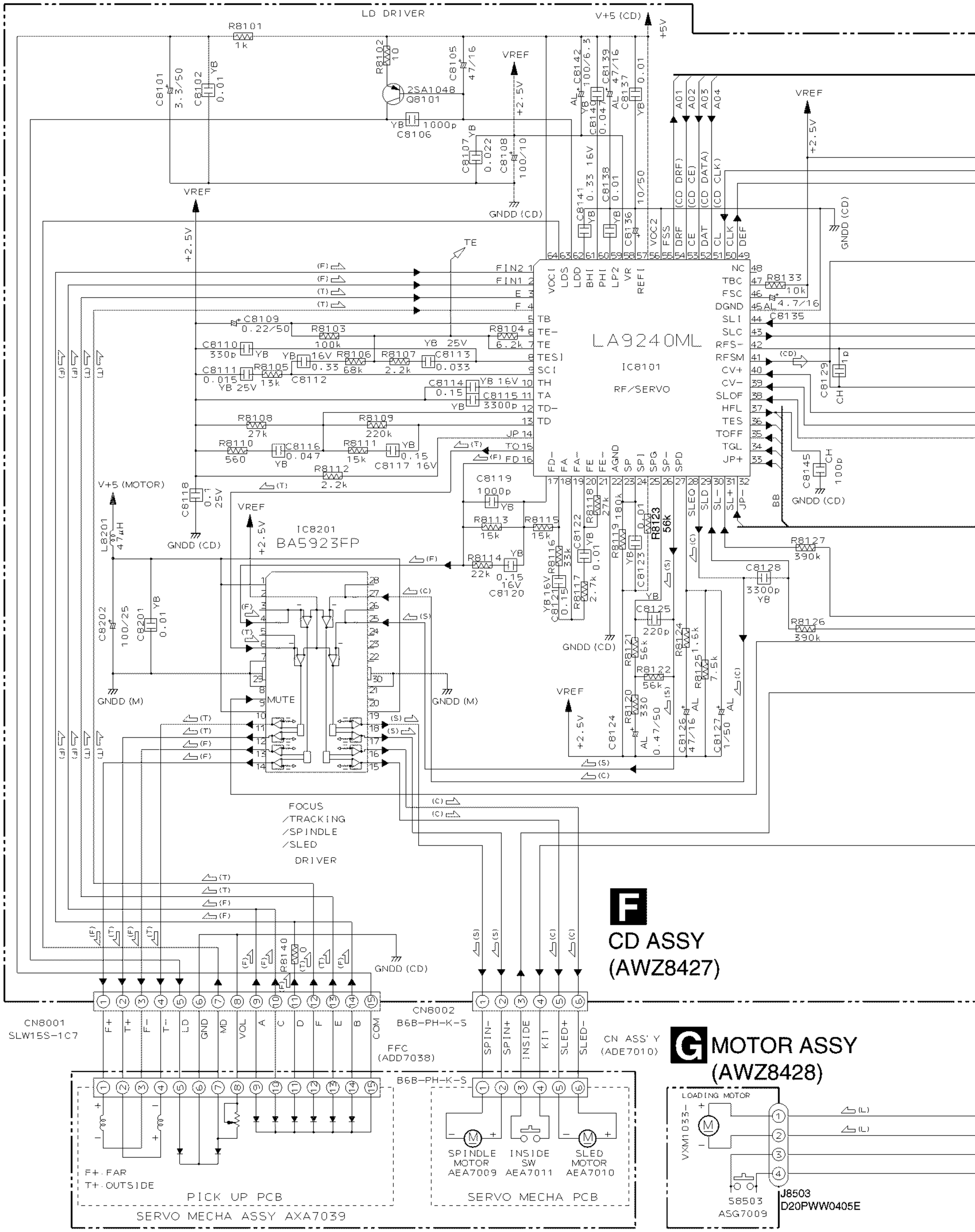
E FM/AM TUNER MODULE
(AXQ7061)

Notes

1. RESISTORS
   Indicated in Ω, 1/10W±5% Tolerance unless otherwise noted K:KΩ, M:MΩ.
2. CAPACITORS
   Indicated in Capacity(μF)/VOLTAGE(V) unless otherwise noted P:PF.



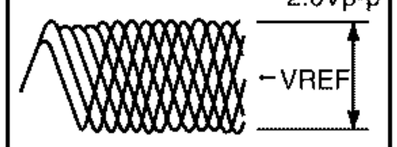
3.4 CD, MOTOR AND SW ASSEMBLIES



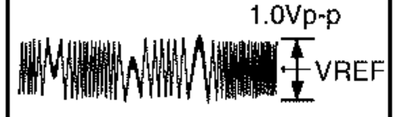
(CD) : CD AUDIO SIGNAL ROUTE
(F) : FOCUS SERVO LOOP LINE
(T) : TRACKING SERVO LOOP LINE
(S) : SPINDLE MOTOR ROUTE
(C) : CARRIAGE MOTOR ROUTE
(L) : LOADING MOTOR ROUTE

Note: The encircled numbers denote measuring point in the schematic diagram.

① CN8005- Pin 1 :
PLAY MODE (RF)
H : 500nsec/div



② CN8005- Pin 2 :
TEST MODE,
Tracking Open(TRER)
H : 5msec/div



VREF:CN8005- Pin3

IC8301 LC78622ED DSP

CN1052

1	+5 (CD)
2	DGND (CD)
3	CD Rch
4	AGND
5	CD Lch
6	DGND (M)
7	+5 (M)
8	CD DRF
9	CD CS
10	CD RESET
11	CD CE
12	CLAMP
13	OPEN
14	INSIDE
15	DISC123
16	KI1
17	CD DATA
18	CD SQOUT
19	CD CLK
20	CD WRQ

CN8004
HLEM20R-1

CN8003
52151-0610

1	LD−
2	LD+
3	OPEN
4	KI1
5	CLAMP
6	DISC123

D20PWY0610E
J8501
J8502
S8501 DSG1017
S8502 ASG7009

H
SW ASSY
(AWZ8429)

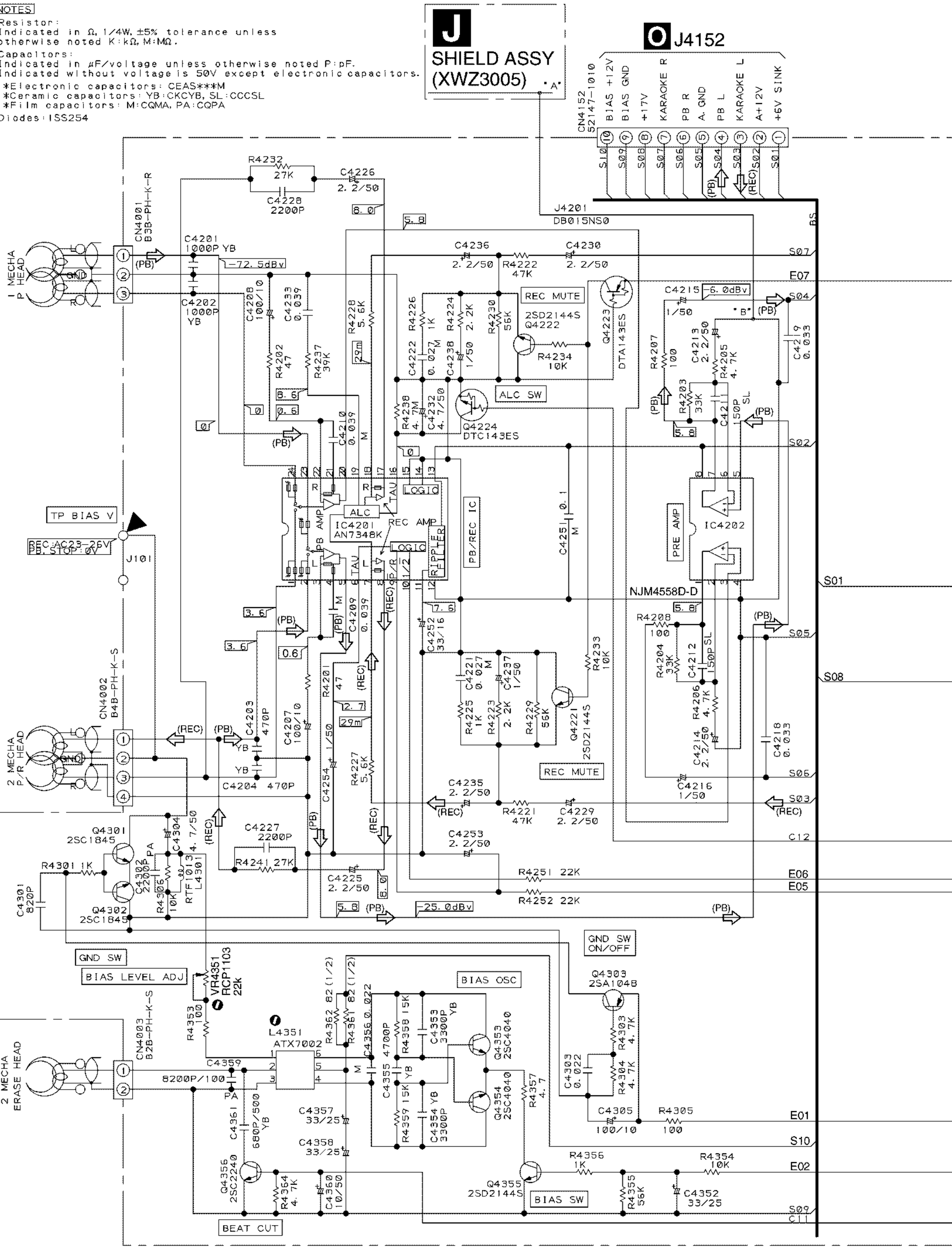
NOTES

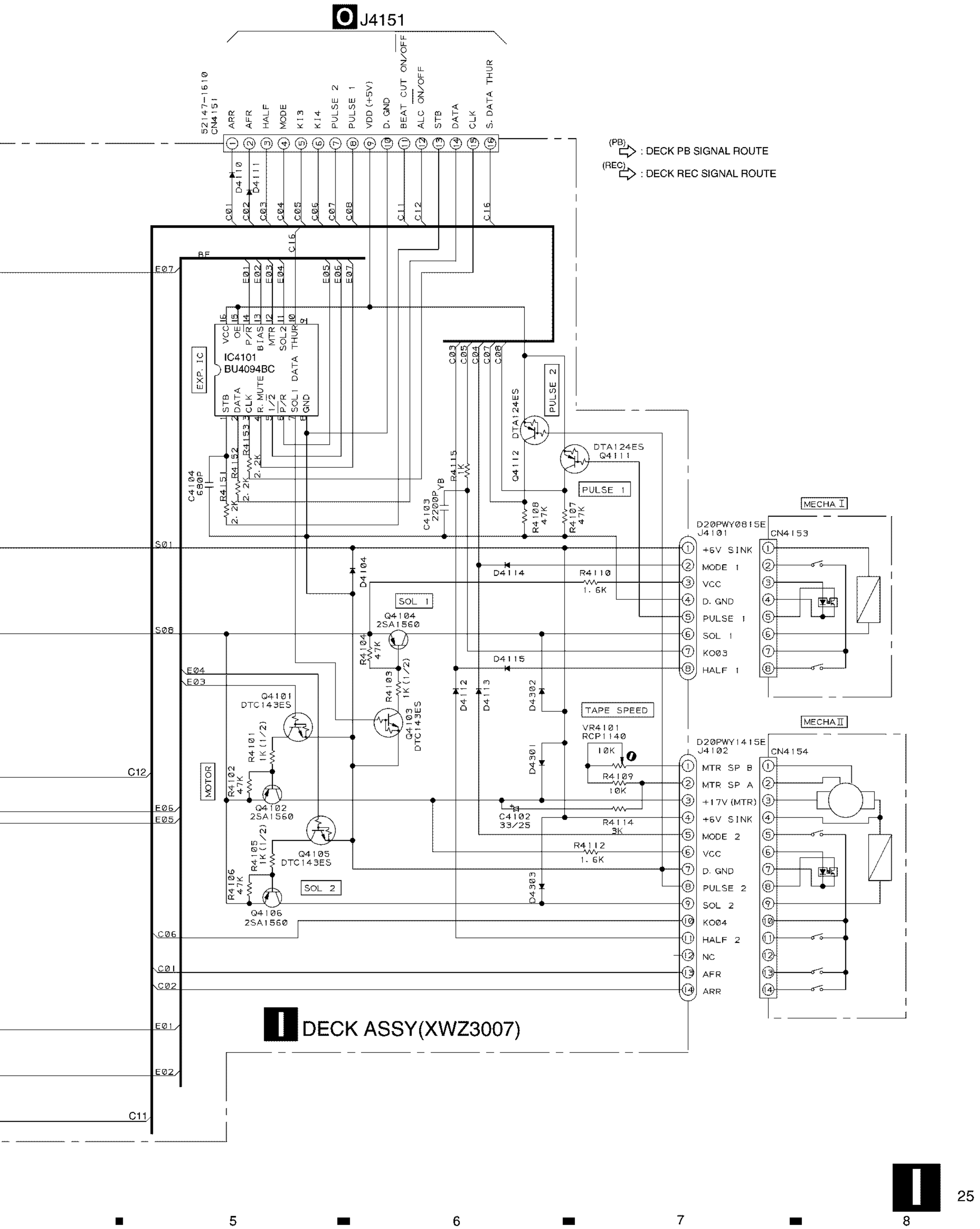
1. Resistors:
Indicated in Ω, 1/10W, ±5% tolerance unless otherwise noted k·kΩ M·MΩ .
2. Capacitors:
Indicated in μF/voltage unless otherwise noted p:pF. Indication without voltage is 50V except electronic capacitors.
*Electronic capacitors CEAS000M
AL : CEAL
*Ceramic capacitors : CKSQYF000Z
YB·CKSQYB CH·CCSQCH
3. Inductors·LFA000

3.5 DECK AND SHIELD ASSEMBLIES

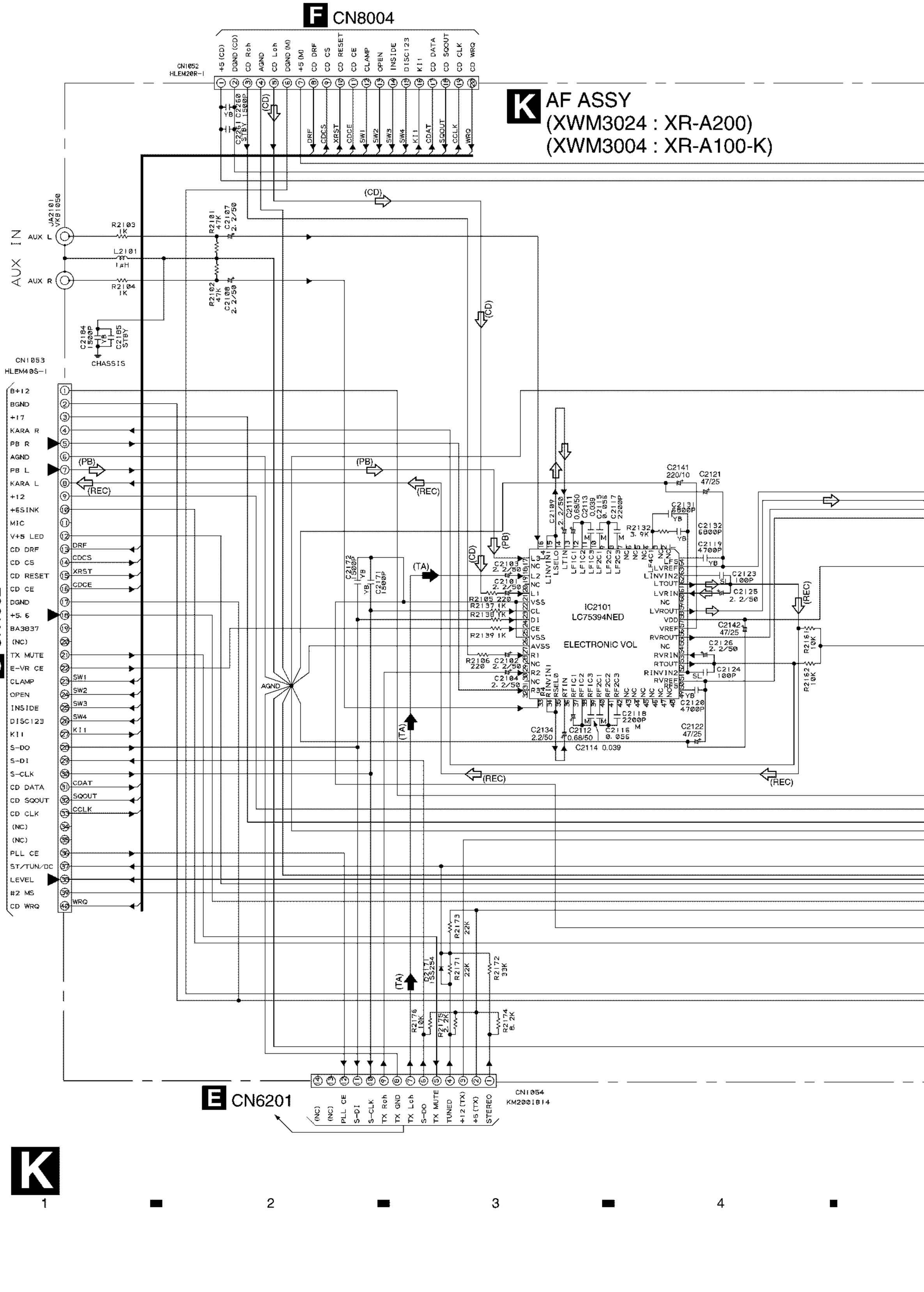
NOTES

1. Resistor:
   Indicated in Ω, 1/4W, ±5% tolerance unless otherwise noted K:kΩ, M:MΩ.
2. Capacitors:
   Indicated in μF/voltage unless otherwise noted P:pF.
   Indicated without voltage is 50V except electronic capacitors.
   *Electronic capacitors: CEAS***M
   *Ceramic capacitors: YB:CKCYB, SL:CCCSL
   *Film capacitors: M:CQMA, PA:CQPA
3. Diodes: ISS254




J4151
52147-1610
CN4151
ARR
AFR
HALF
MODE
K13
K14
PULSE 2
PULSE 1
VDD (+5V)
D. GND
BEAT CUT ON/OFF
ALC ON/OFF
STB
DATA
CLK
S. DATA THUR
(PB) : DECK PB SIGNAL ROUTE
(REC) : DECK REC SIGNAL ROUTE
EXP. IC
IC4101
BU4094BC
VCC
OE
P/R
BIAS
MTR
SOL2
THUR
STB
DATA
CLK
R. MUTE
1/2
P/R
SOL1
DATA
GND
PULSE 2
Q4112 DTA124ES
DTA124ES Q4111
PULSE 1
R4108 47K
R4107 47K
R4115 1K
C4103 2200P YB
C4104 680P
R4151 2.2K
R4152 2.2K
R4153 2.2K
MECHA I
D20PWY0815E
J4101
CN4153
+6V SINK
MODE 1
VCC
D. GND
PULSE 1
SOL 1
KO03
HALF 1
D4114
R4110 1.6K
SOL 1
Q4104 2SA1560
R4104 47K
R4103 1K (1/2)
Q4103 DTC143ES
D4115
D4112
D4113
D4302
D4301
D4303
TAPE SPEED
VR4101 RCP1140
10K
R4109 10K
C4102 33/25
R4114 3K
R4112 1.6K
MECHA II
D20PWY1415E
J4102
CN4154
MTR SP B
MTR SP A
+17V (MTR)
+6V SINK
MODE 2
VCC
D. GND
PULSE 2
SOL 2
KO04
HALF 2
NC
AFR
ARR
Q4101 DTC143ES
R4101 1K (1/2)
R4102 47K
Q4102 2SA1560
MOTOR
Q4105 DTC143ES
R4105 1K (1/2)
R4106 47K
Q4106 2SA1560
SOL 2
D4104
C01
C02
C03
C04
C05
C06
C07
C08
C11
C12
C16
E01
E02
E03
E04
E05
E06
E07
S01
S08
BF
DECK ASSY(XWZ3007)

3.6 AF ASSY


F CN8004
CN1052
HLEM20R-1
+5 (CD)
DGND (CD)
CD Rch
AGND
CD Lch
DGND (M)
+5 (M)
CD DRF
CD CS
CD RESET
CD CE
CLAMP
OPEN
INSIDE
DISC123
KII
CD DATA
CD SQOUT
CD CLK
CD WRQ
K AF ASSY
(XWM3024 : XR-A200)
(XWM3004 : XR-A100-K)
AUX IN
AUX L
AUX R
JA2101
VKB1050
R2103 1K
R2104 1K
L2101 1µH
R2101 47K
R2102 47K
C2107 2.2/50
C2108 2.2/50
C2184 1500P YB
C2185 STBY
CHASSIS
CN1053
HLEM40S-1
O CN1902
B+12
BGND
+17
KARA R
PB R
AGND
PB L
KARA L
+12
+6SINK
MIC
V+5 LED
CD DRF
CD CS
CD RESET
CD CE
DGND
+5.6
BA3837
(NC)
TX MUTE
E-VR CE
CLAMP
OPEN
INSIDE
DISC123
KII
S-DO
S-DI
S-CLK
CD DATA
CD SQOUT
CD CLK
(NC)
(NC)
PLL CE
ST/TUN/DC
LEVEL
#2 MS
CD WRQ
(CD)
(PB)
(REC)
(TA)
IC2101
LC75394NED
ELECTRONIC VOL
AGND
C2109 2.2/50
C2111 0.68/50
C2113 0.039
C2115 0.056
C2117 2200P
C2103 2.2/50
C2101 2.2/50
C2102 2.2/50
C2104 2.2/50
C2134 2.2/50
C2112 0.68/50
C2116 0.056
C2114 0.039
C2118 2200P
C2141 220/10
C2121 47/25
C2131 6800P YB
C2132 6800P
R2132 3.9K
C2119 4700P YB
C2123 100P
C2125 2.2/50
C2142 47/25
C2126 2.2/50
C2124 100P
C2120 4700P YB
C2122 47/25
R2151 10K
R2152 10K
C2172 1500P YB
C2171 1500P YB
R2105 220
R2137 1K
R2138 1K
R2139 1K
R2106 220
R2173 22K
R2171 22K
R2172 33K
D2171 1SS254
R2175 2.2K
R2176 10K
R2174 8.2K
E CN6201
CN1054
KM200IB14
(NC)
(NC)
PLL CE
S-DI
S-CLK
TX Rch
TX GND
TX Lch
S-DO
TX MUTE
TUNED
+12 (TX)
+5 (TX)
STEREO

XR-A200, XR-A100-K

NOTES
1. Resistors:
Indicated in Ω, 1/4W, ±5% tolerance unless otherwise noted K:kΩ M:MΩ.
2. Capacitors:
Indicated in μF/voltage unless otherwise noted P:pF. Indication without voltage is 50V except electronic capacitors.
*Electronic capacitors:CEAS000M
*Ceramic capacitors:CKCYF000Z
YB:CKCYB YX:CGCYX SL:CCCSL
*Film capacitors
M:CQMA
3. Inductors:LAU000

⇨ : AUDIO SIGNAL ROUTE
(CD) ⇨ : CD AUDIO SIGNAL ROUTE
(TA) ➡ : TUNER AUDIO SIGNAL ROUTE
(PB) ⇨ : DECK PB SIGNAL ROUTE
(REC) ⇨ : DECK REC SIGNAL ROUTE

J2001 D20PWW0515E
Ro Ri G Li Lo

R2247 6.8K
C2239 2.2/50
R2245 1.8K
Lch
IC2203(2/2) NJM4558D-D
IC2203(1/2)
Rch
C2240 2.2/50
R2244 1.8K
R2246 6.8K

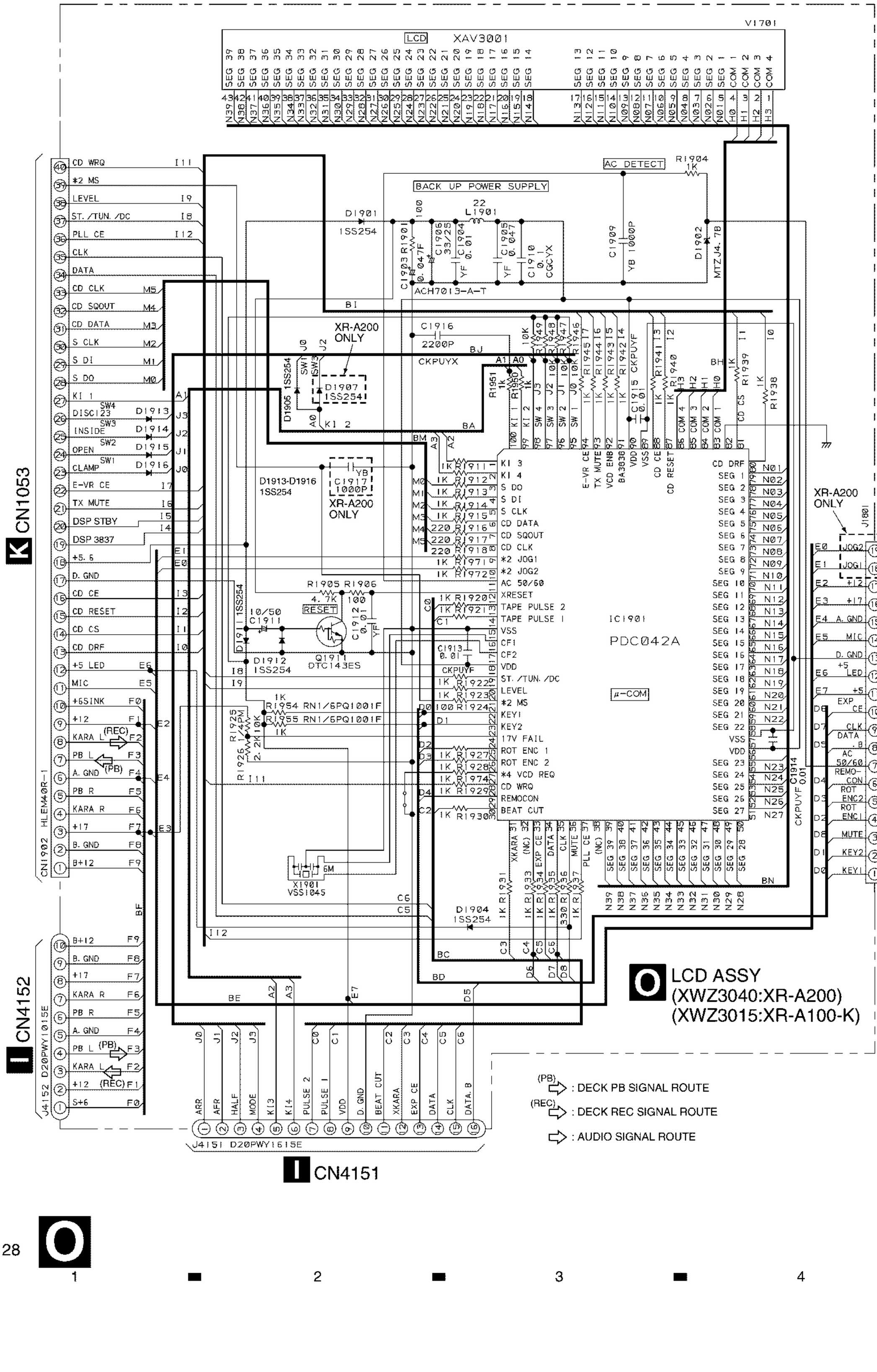
CN1201 AKE7035
SP L
SP L GND
SP R GND
SP R
SP OUT
CHASSIS

1SS254 × 3
D2103 D2101 D2102
XR-A200 ONLY
R2164 1K
Q2151 2SC2458
C2163 2.2/50
R2182 1M
R2165 47K
R2166 33K
R2168 39K
D2161 1SS254
Q2162 2SC2458
R2167 820K
C2164 2.2/50
R2163 1K
R2161 100
C2161 10/50
C2162 1/50
R2169 47K
C2255 YB 1000P
CHASSIS
D1055 MTZJ20A
2SC2458 Q1056 R1059 4.7K
C1058 10/50
D1056 MTZJ15A
IC1051 NJM78M12FA
+12V
C1057 10/50
C1056 10/50
+5V
C1059 100/10

C1062 1500P
C1070 1500P
C1063 1500P
C1067 1500P
R1063 4.7
L1052 ATH-133
R1065 4.7
L1054 ATH-133

CN1301
1 REF GND
2 HELP
3 AGND
4 +17
5 +5.6
6 DC
7 DGND (UCOM, DSP)
8 SP L+
9 SP R+
10 SP R−
11 SP L−
12 DGND (CD MOTOR)
13 SENS
14 +5
15 R IN
16 SGND
17 L IN
CN1051 KM200TA17

3.7 CD SW, DISPLAY, LAMP AND LCD ASSEMBLIES



N LAMP ASSY
(XWZ3024:XR-A200)
(XWZ3008:XR-A100-K)

PL1903, 1904 : AEL7008 12V, 0.15A
(WITH GREEN CAP)

PL1901, 1902 : AEL7007
12V, 0.15A

PL1901 PL1902 PL1903 PL1904

D1841 1SS254
D1842 1SS254

XR-A100-K ONLY

XR-A200 ONLY

R1842 4.7K
R1843 1K
R1841 470
Q1841 2SA1560
Q1842 2SC4040
R1845 150 2W

J1803 D20PWW0325E

NOTES
1. Resistors:
Indicated in Ω, 1/4W, ±5% tolerance unless otherwise noted K : kΩ, M : MΩ.
2. Capacitors:
Indicated in μF/voltage unless otherwise noted P : pF. Indication without voltage is 50V except electronic capacitors.
*Electronic capacitors : CEAS000M
*Ceramic capacitors:
YB : CKCYB YX : CKCYX YF : CKCYF

CD SW ASSY
S1830 : OPEN/CLOSE
S1831 : DISC CHANGE
S1832 : DISC 3
S1833 : DISC 2
S1834 : DISC 1

REMOTE RECEIVER UNIT GP1U27X

C1807 0.01 CKPUYF
D1809 MTZJ6.8A/B
C1801 0.01 CKPUYF

IC1801 BU2092F
GND DATA CLK CE Q0 Q1 Q2 Q3 Q4
VDD XOE Q11 Q10 Q9 COL-SEL ST-BY Q6 Q5

D1808 MTZJ6.8A/B
C1804 1000P YB
R1807 1K
R1806 100
R1801 180

D1801-D1804 SLP9118C51H
D1801 CD D1802 TUN D1803 TAPE D1804 AUX

M DISPLAY ASSY
(XWZ3039:XR-A200)
(XWZ3014:XR-A100-K)

BK K3 K0 K1 K2 L0

J1801 D20PWW1920E : XR-A200
D20PWW1720E : XR-A100-K

XR-A200 ONLY
R1816 47K R1817 47K R1811 47K R1810 47K
JOG S1802 ASX7017
S1801 ASX7017 MAIN VOLUME

J1805
R1830 330 R1831 560 R1832 820 R1833 1.8K
OPEN /CLOSE CHANGE DISC3 DISC2 DISC1
S1830 S1831 S1832 S1833 S1834
S1830-S1834 : ASG1051

J1805 D20PWW0615E

D1807 SLP7118C51H R1802 180
D1806 SLP3118C51H R1803 220
D1805 SLP9118C51H R1804 270
DISC1 DISC2 DISC3

L CD SW ASSY
(XWZ3004)

S1811-S1825 : ASG1051
R1828 100 R1812 120 R1813 150 R1814 180 R1815 270
CD TUNER TAPE AUX SFC
S1821 S1822 S1823 S1824 S1825 XR-A100-K ONLY
R1819 100 R1820 120 R1821 150 R1822 180 R1823 270 R1824 330 R1825 560 R1826 820 R1827 1.8K
POWER P.BASS CLOCK /ADJ TIMER ASES /COPY REC STOP
S1811 S1812 S1813 S1814 S1815 S1816 S1817 S1818 S1819 S1820

J1801
19 JOG2
18 JOG1
17 +12
16 +17
15 A. GND
14 MIC
13 D. GND L2552 1μH
12 +5 LED
11 +5
10 EXP CE K0
9 CLK K1
8 DATA. B K2
7 AC 50/60 L1
6 REMOCON K3
5 ROT ENC2 K5
4 ROT ENC1 K4
3 MUTE
2 KEY2
1 KEY1
L2

BL

DTWY0835E J1201
L0 ST-BY 8
L1 AC 50/60 7
L2 MUTE 6
SP R 5
HP R 4
H. GND 3
HP L 2
SP L 1

C CN1302

"E" J9998

CHASSIS

CKPUYB C2555 1000P

J9998 DE020WE0

L1250 CKPUYF0.01 1μH
C1203
R1202 PMF
C1202
R1201 PMF
CKPUYF0.01

HEAD PHONE

JA1201 AKN7005

R1201, R1202 : 330 1W

DISPLAY ASSY
S1801 : VOLUME (DOWN-UP)
S1802 : S.M.JOG (XR-A200 ONLY)
S1811 : STANDBY/ON
S1812 : P.BASS (DEMO)
S1813 : TIMER/WAKE-UP
S1814 : DISPLAY/CLOCK ADJ
S1815 : ASES/COPY
S1816 : REC START/STOP
S1817 : (–) ▶▶| (GREEN)] TUNING
S1818 : (+) |◀◀ (AMBER)]
S1819 : STOP (DUAL)
S1820 : ◀▶ CD-PLAY/PAUSE TAPE-PLAY/DIR
S1821 : CD
S1822 : TUNER/BAND
S1823 : TAPE I/II
S1824 : AUX (ILLUMINATION)
S1825 : SFC (XR-A100-K ONLY)

L M N 29

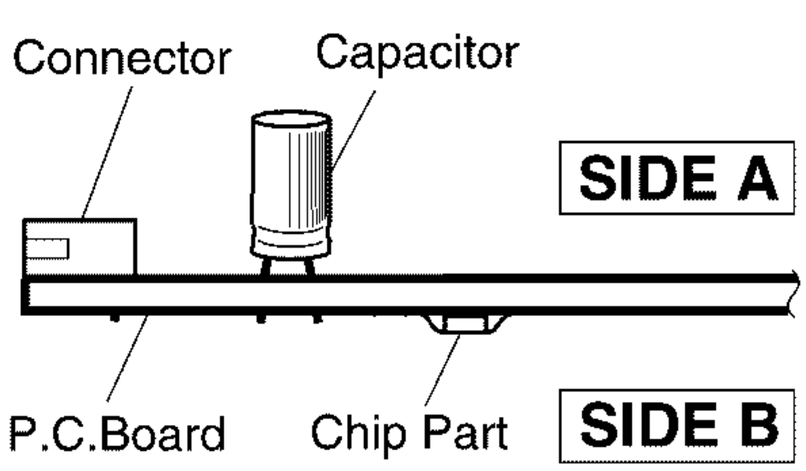
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

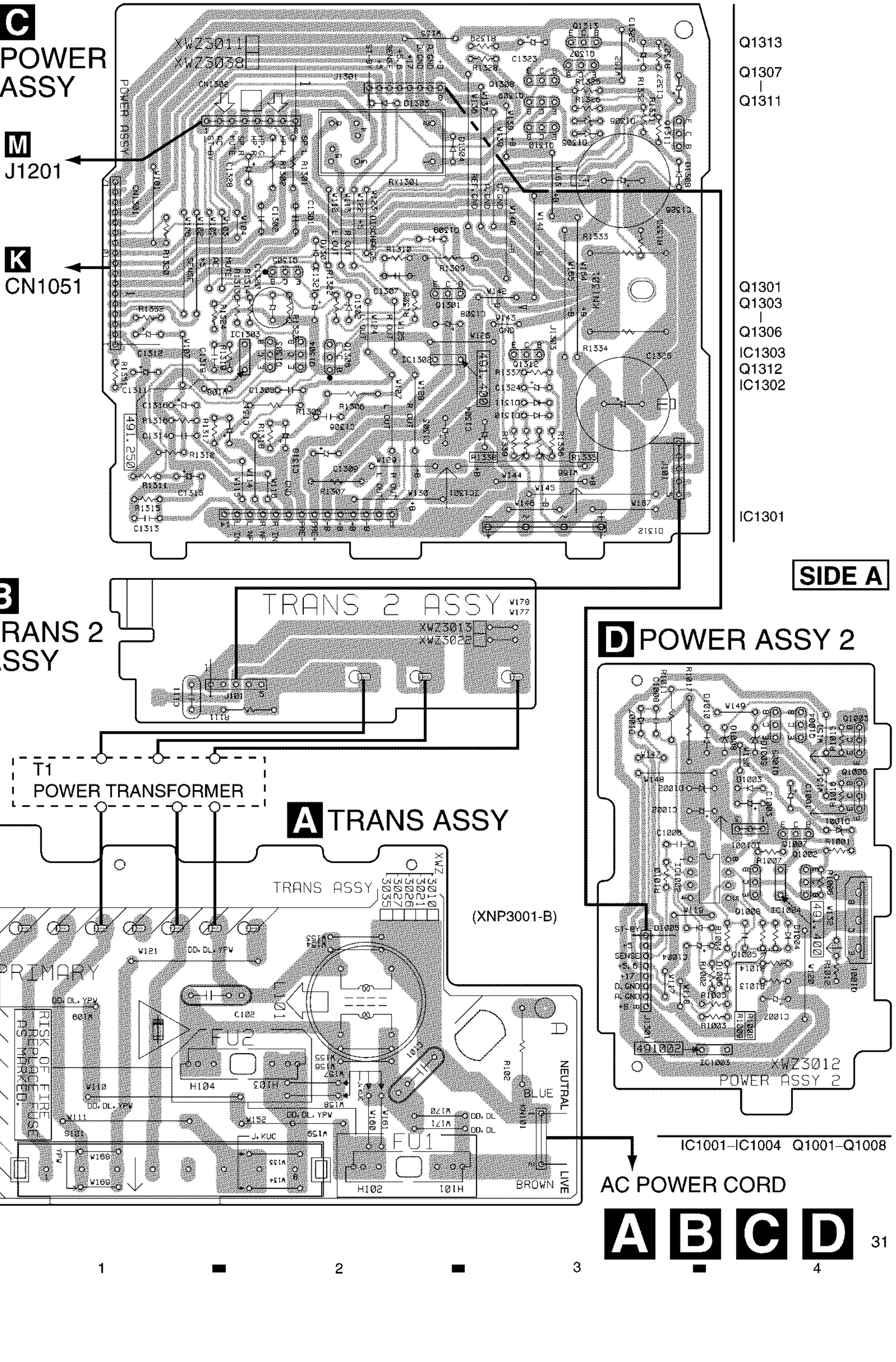
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



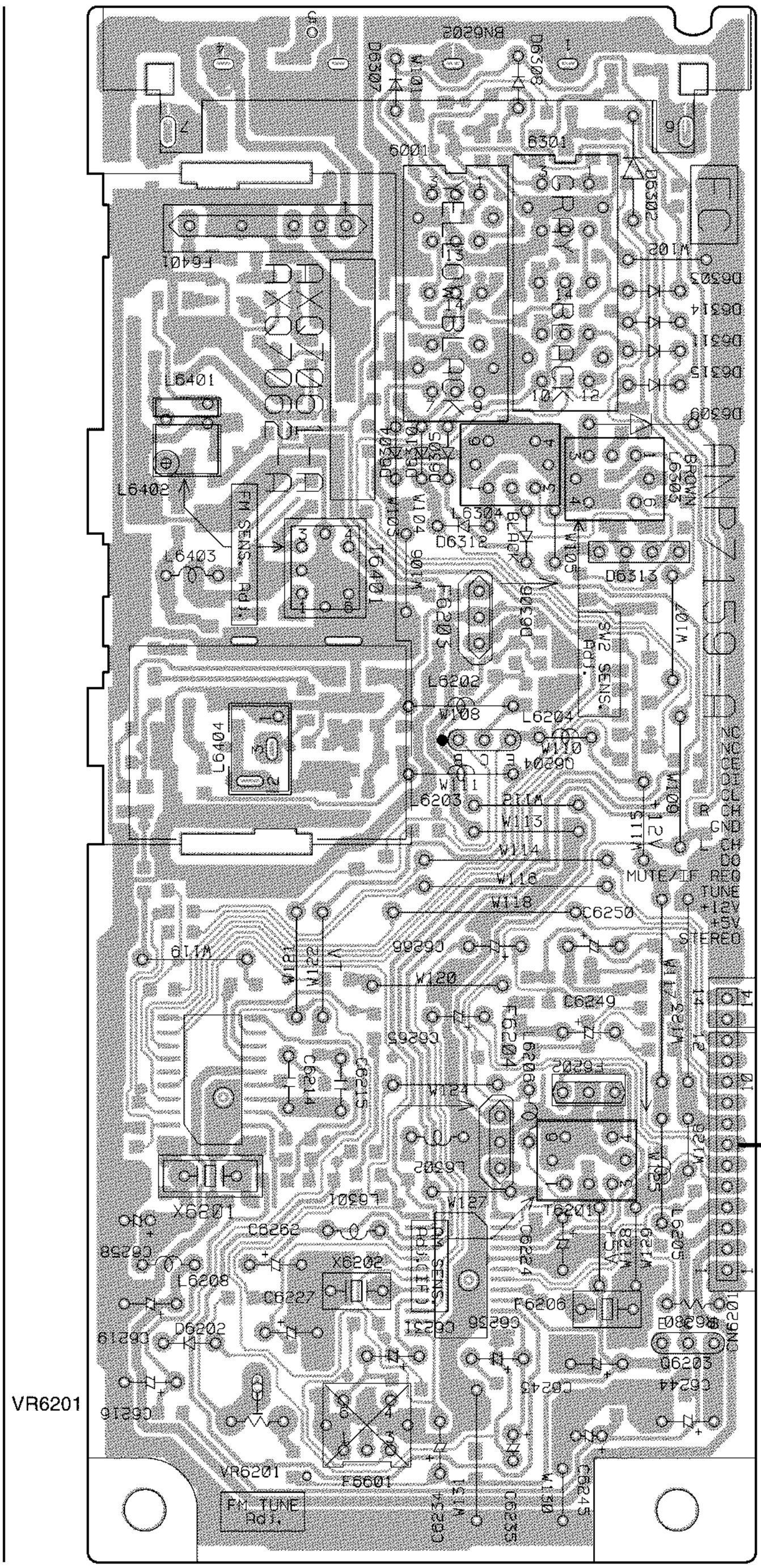
4.1 TRANS, TRANS 2, POWER ASSEMBLIES AND POWER ASSY 2



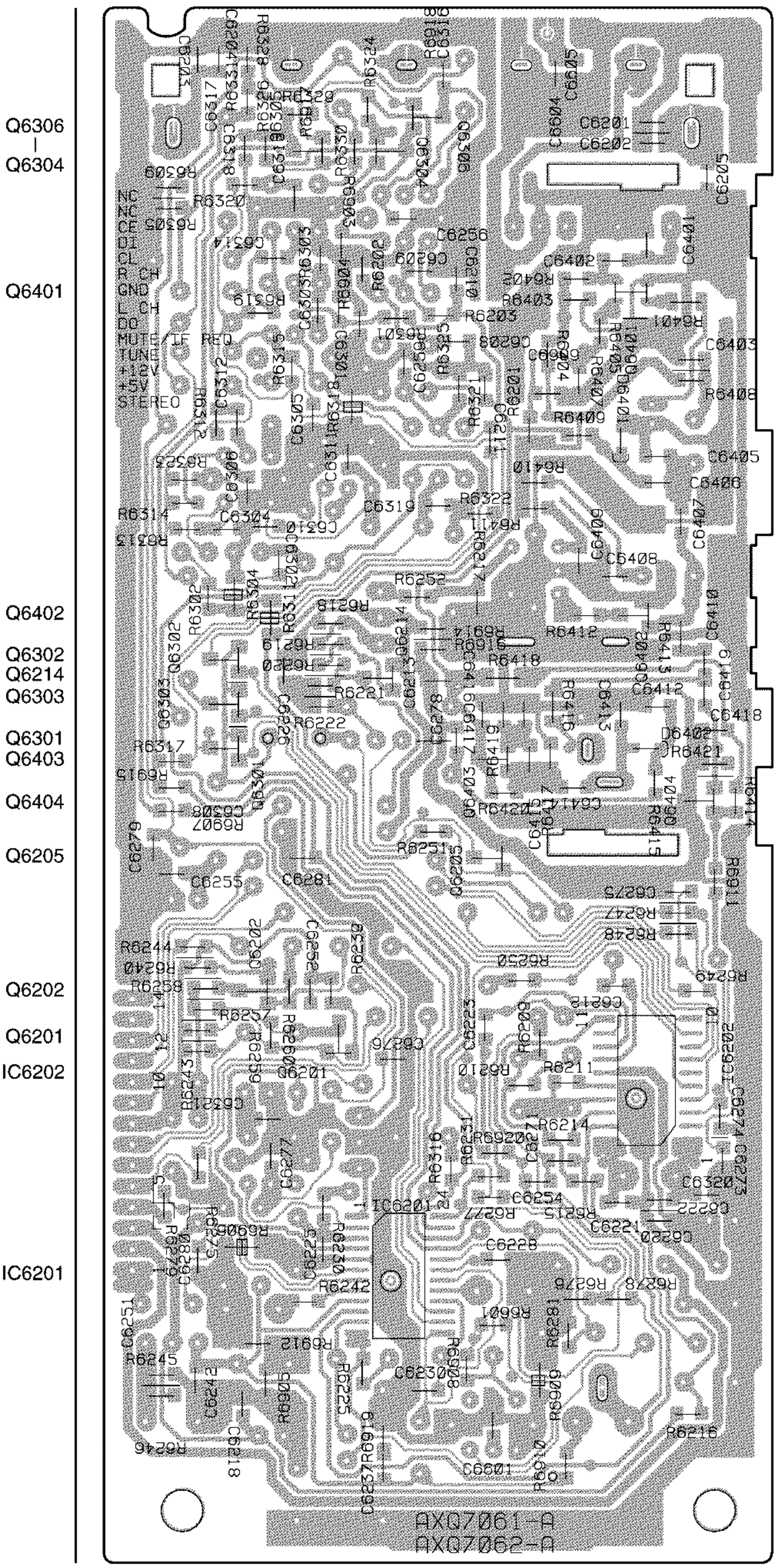
A B C D

4.2 FM/AM TUNER MODULE

E FM/AM TUNER MODULE



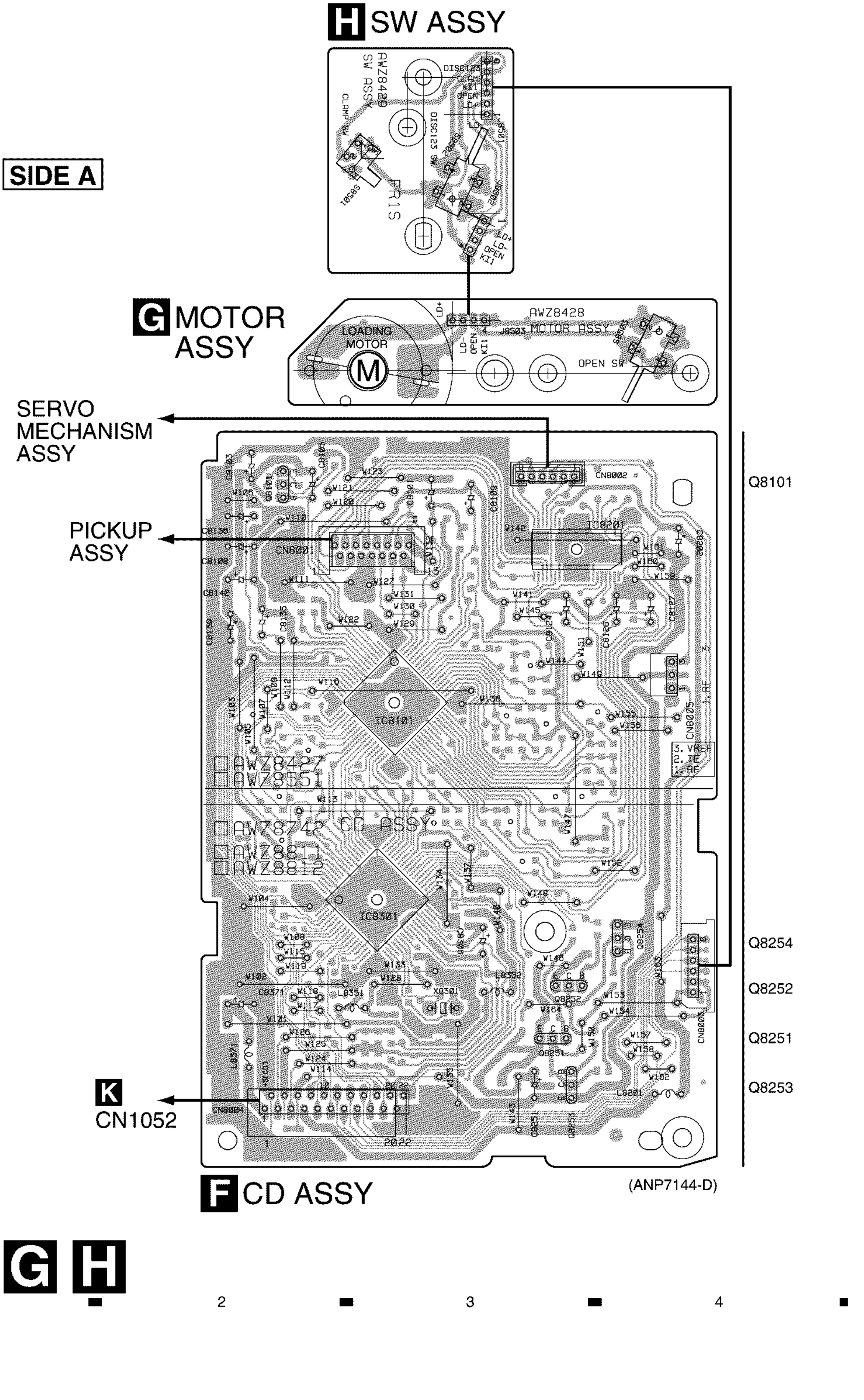
E FM/AM TUNER MODULE



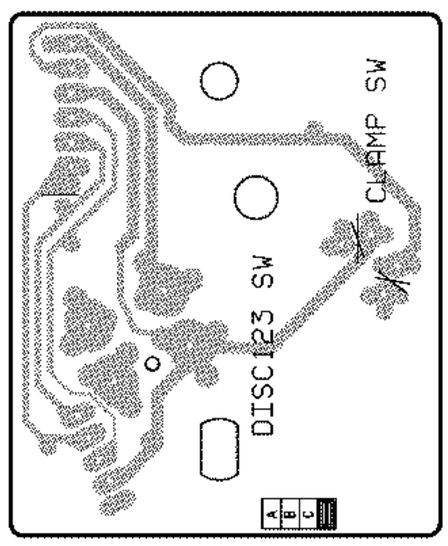
(ANP7159-A)

SIDE B

4.3 CD, MOTOR AND SW ASSEMBLIES

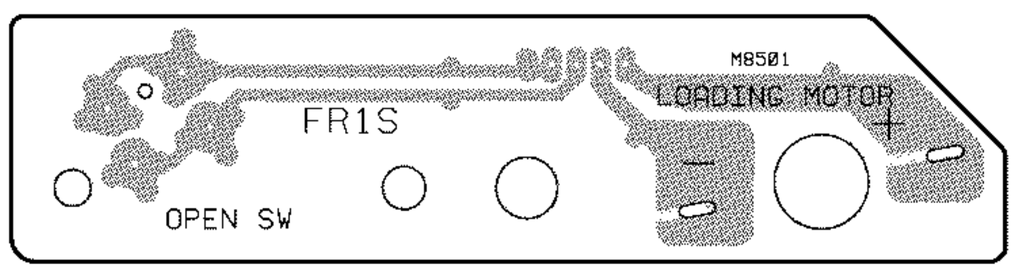


H SW ASSY



SIDE B

G MOTOR ASSY



IC8201

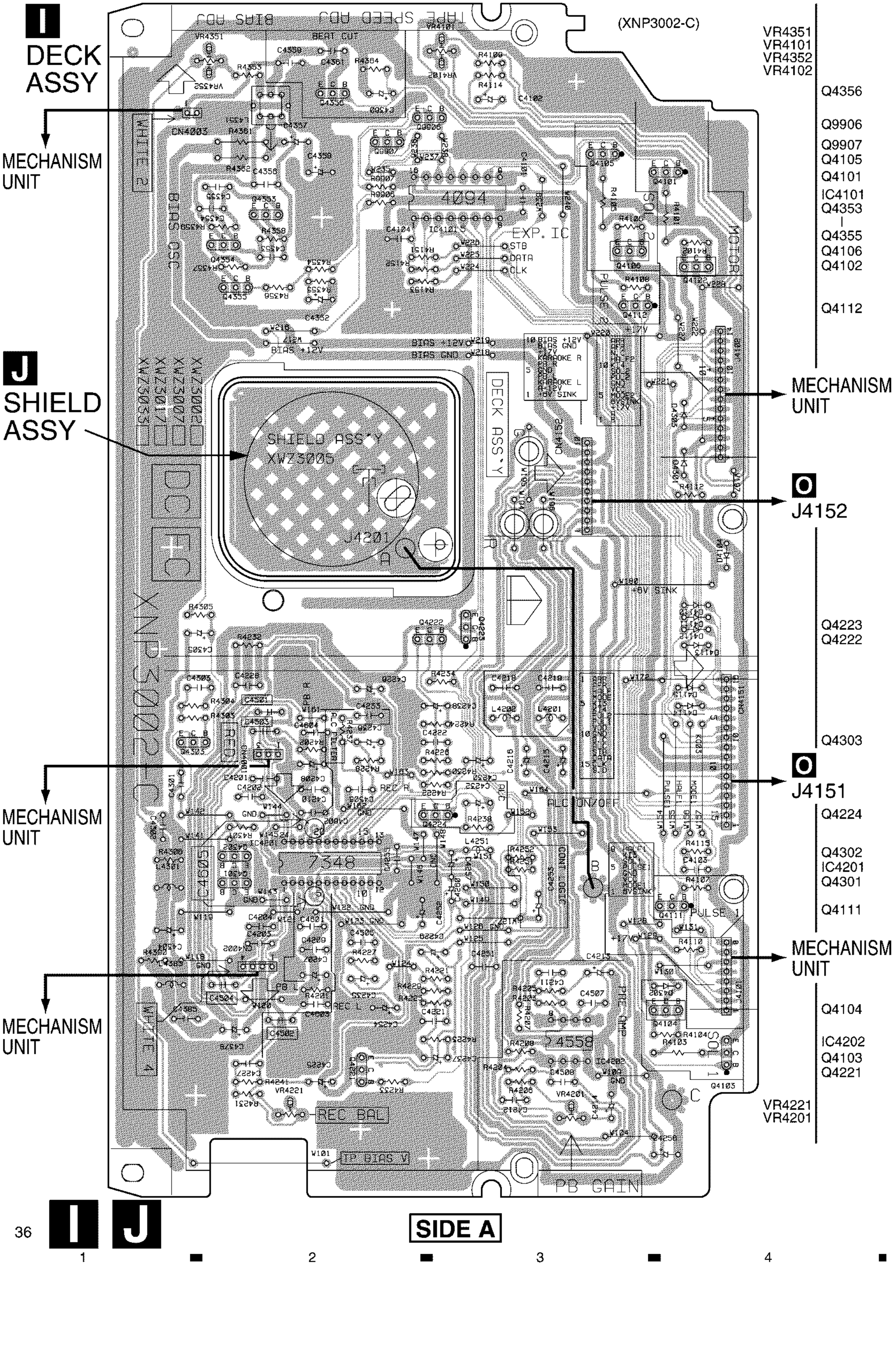
IC8101

IC8301

F CD ASSY

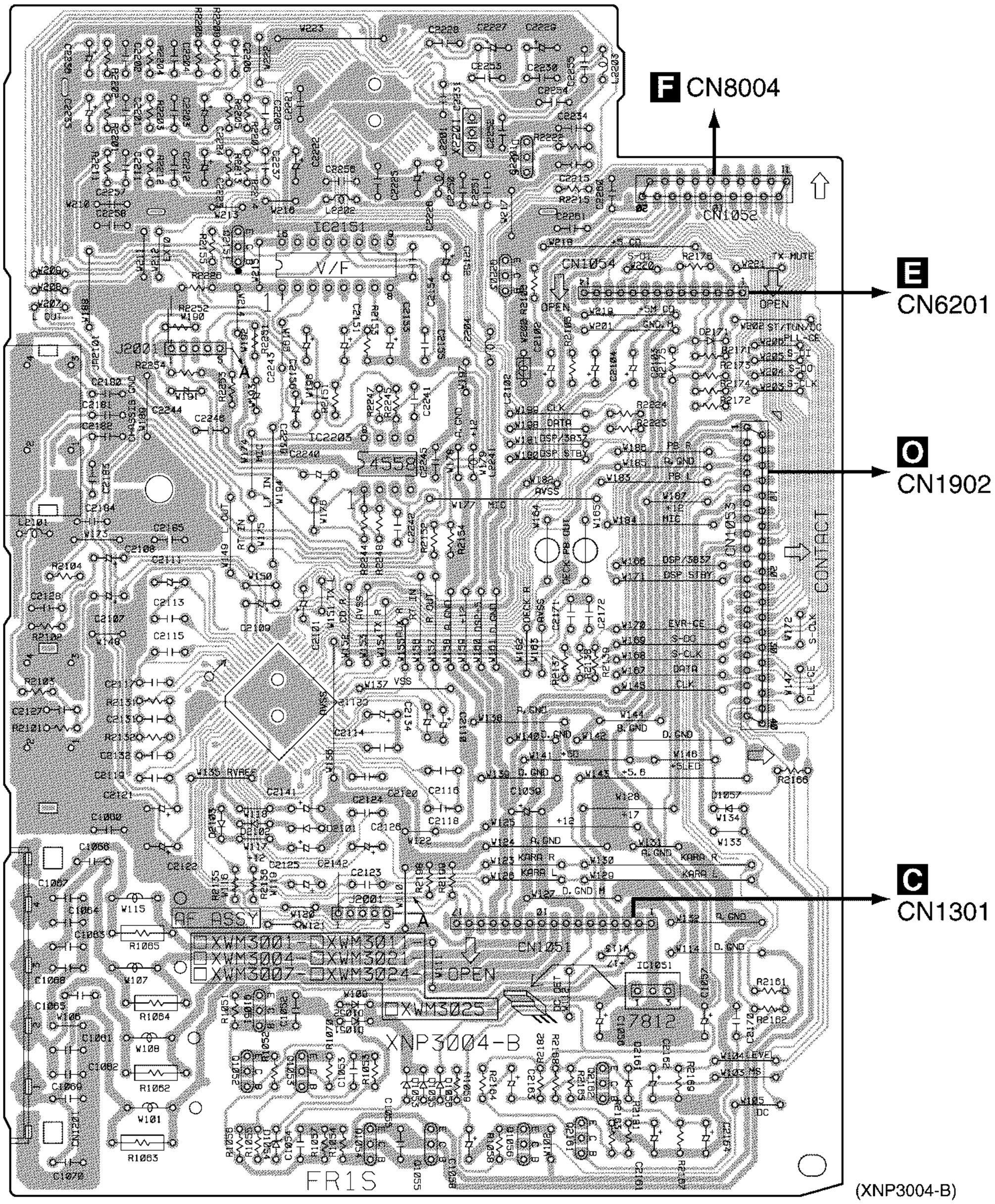
(ANP7144-D)

4.4 DECK AND SHIELD ASSEMBLIES



4.5 AF ASSY

K AF ASSY

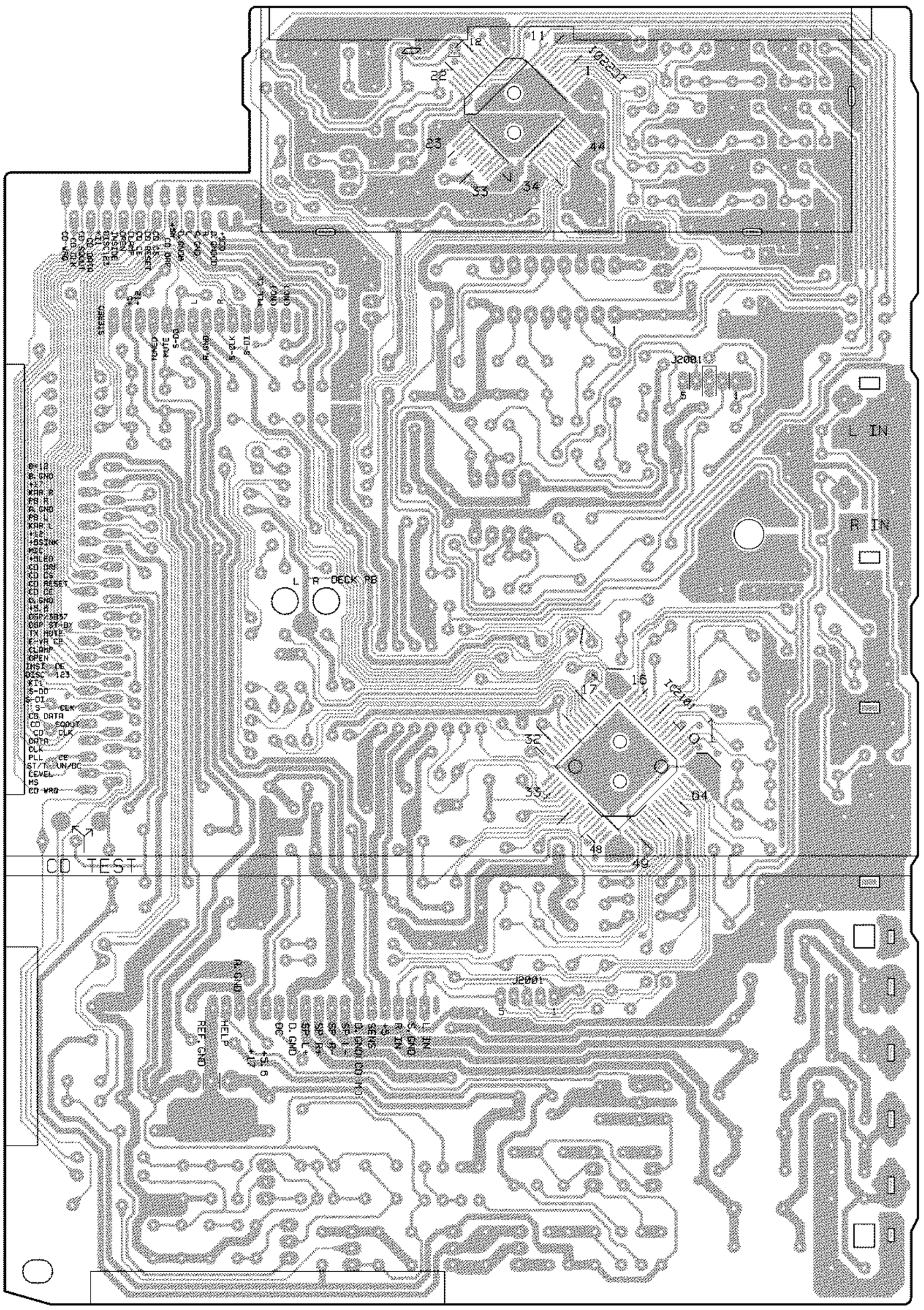


(XNP3004-B)

Q2151 IC2151 IC2203 Q2203 Q2201
Q1051–Q1056 Q2161 Q2162 IC1051

SIDE A

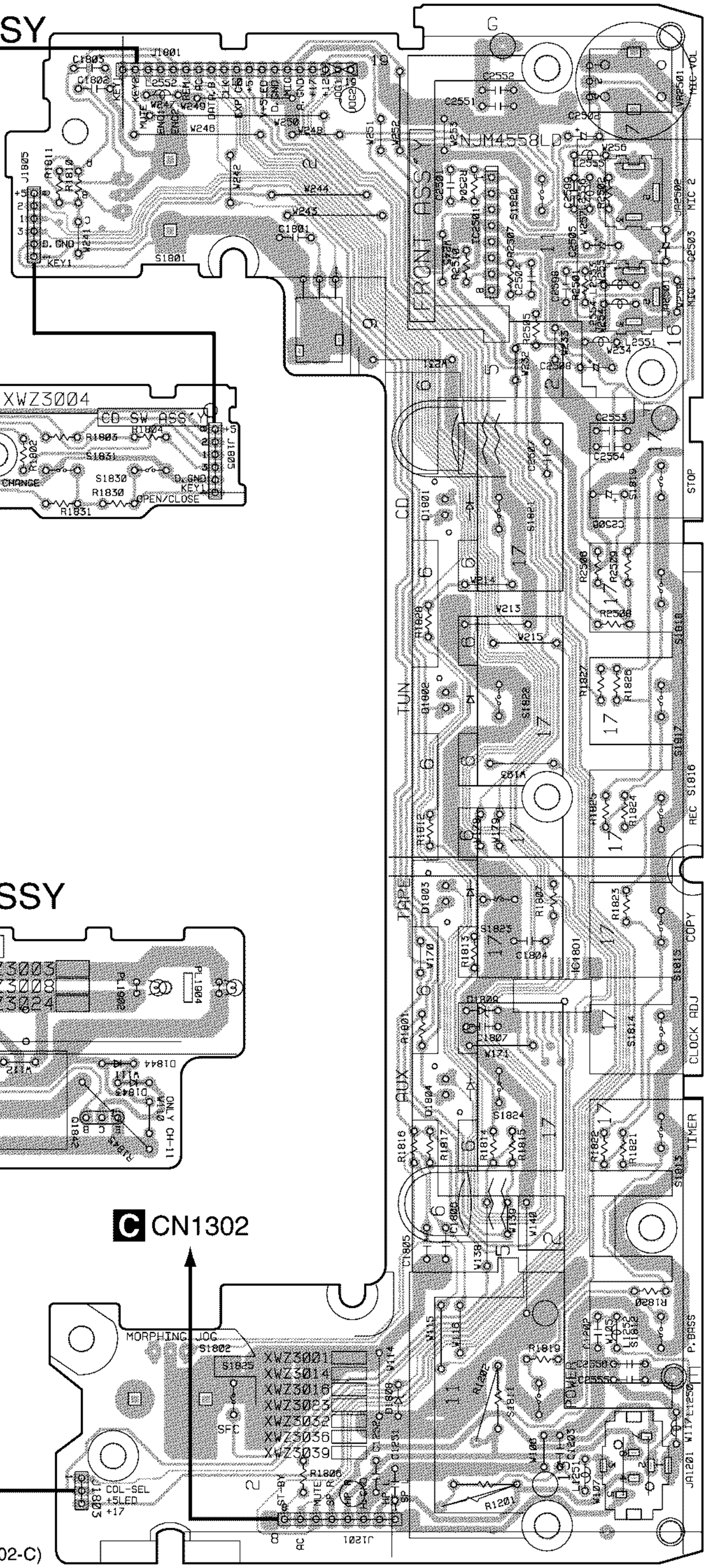
KAF ASSY



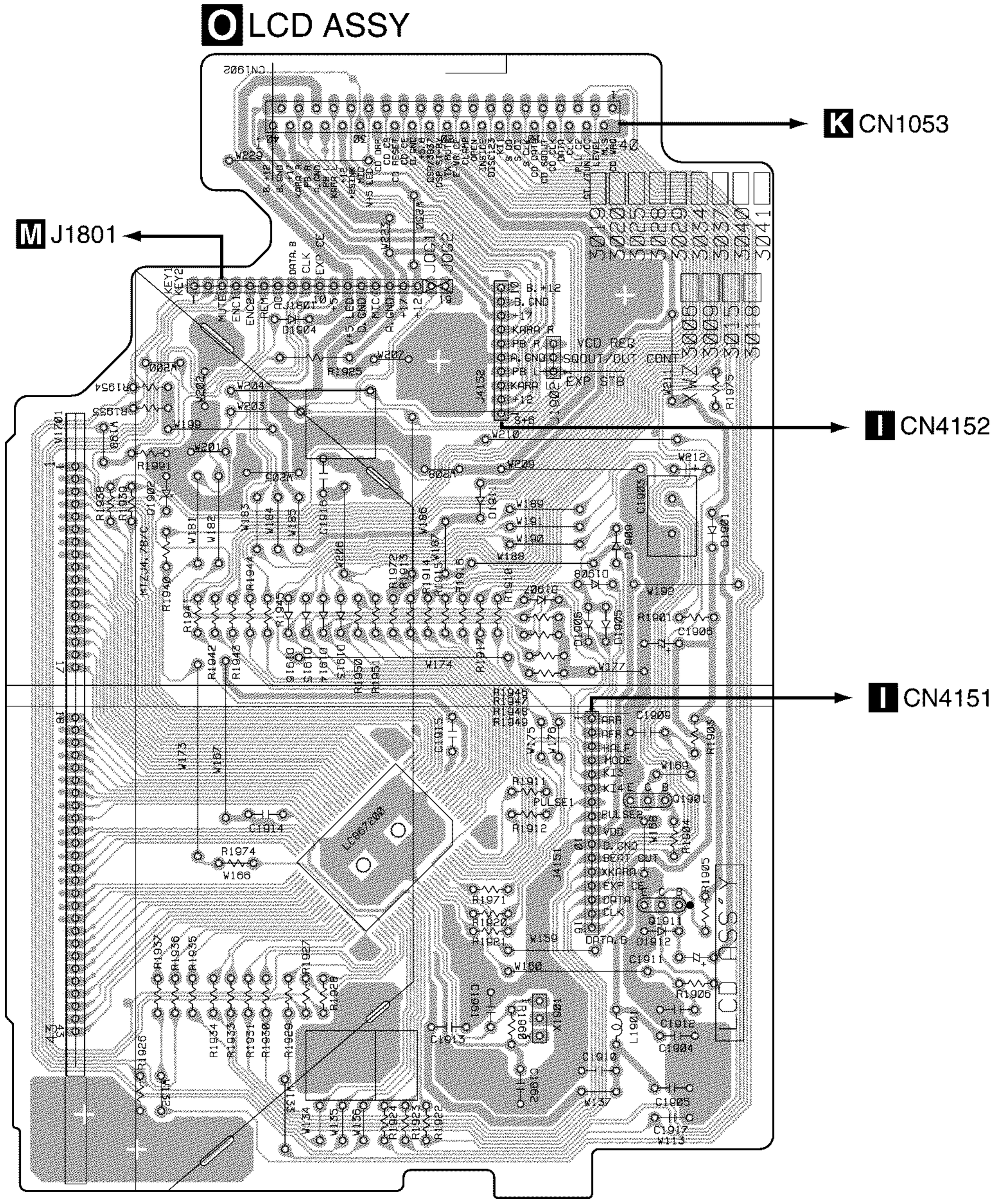
SIDE B

4.6 CD SW, DISPLAY AND LAMP ASSEMBLIES

M DISPLAY ASSY

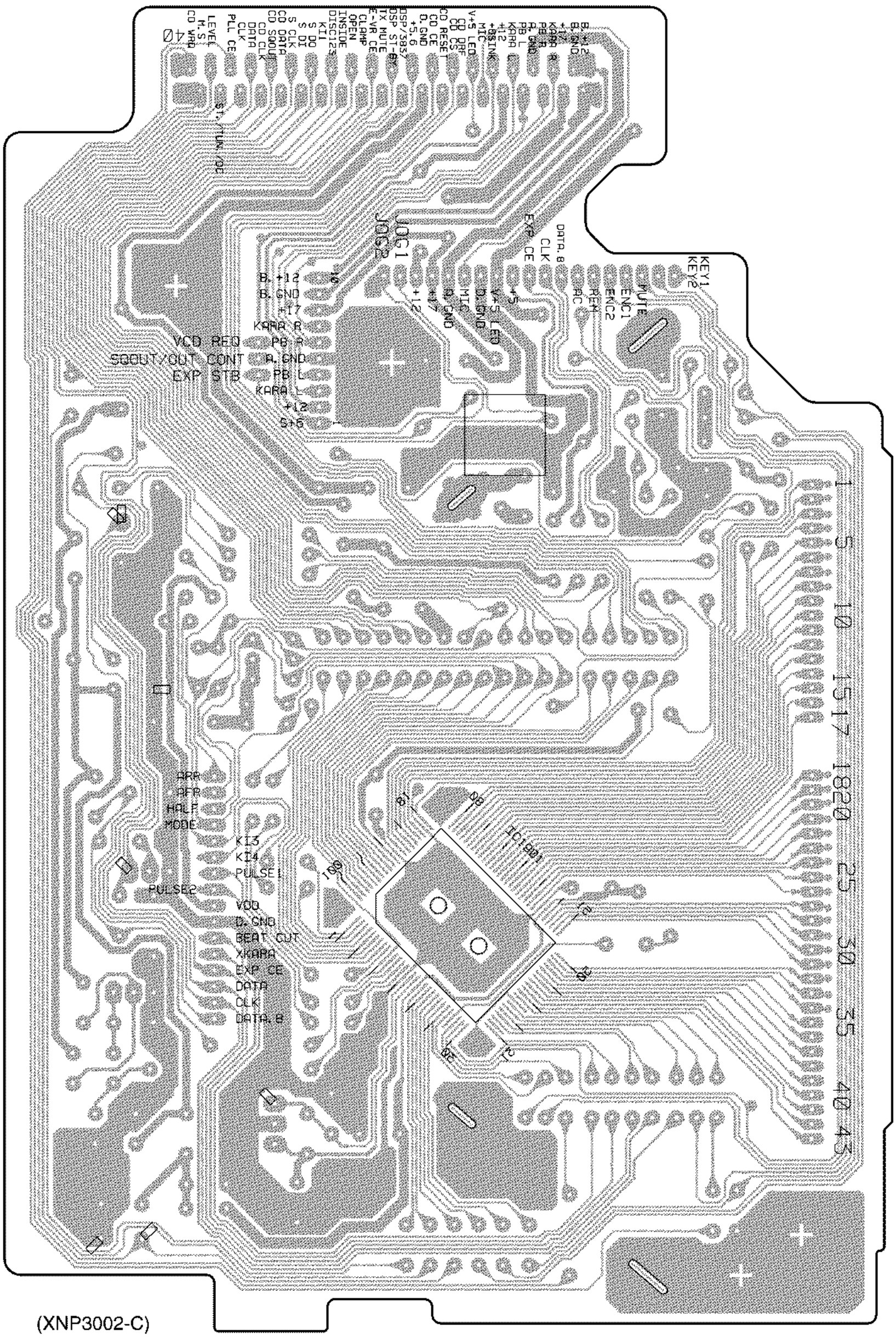


4.7 LCD ASSY



SIDE A

LCD ASSY



SIDE B

5. PCB PARTS LIST

NOTES: ●**Parts marked by "NSP" and ⊗ can not be supplied.**

●*The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

●*When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56 × 10¹ → 561 ..... RD1/4PU 5 6 1 J
47k Ω → 47 × 10³ → 473 ..... RD1/4PU 4 7 3 J
0.5 Ω → R50 ..... RN2H R 5 0 K
1 Ω → 1R0 ..... RS1P 1 R 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562 × 10¹ → 5621 ..... RN1/4PC 5 6 2 1 F

■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.		Remarks
		XR-A200	XR-A100-K	
⊗	FM AM TUNER MODULE	AXQ7061	AXQ7061	
⊗	AF ASSY	XWM3024	XWM3004	
NSP	POWER SUPPLY ASSY	XWM3005	XWM3005	
⊗	├POWER ASSY	XWZ3011	XWZ3011	
⊗	├POWER ASSY 2	XWZ3012	XWZ3012	
⊗	├TRANS ASSY	XWZ3010	XWZ3010	
⊗	└TRANS 2 ASSY	XWZ3013	XWZ3013	
NSP	COMPLEX ASSY	XWM3027	XWM3006	
⊗	├DECK ASSY	XWZ3007	XWZ3007	
⊗	├CD SW ASSY	XWZ3004	XWZ3004	
NSP	├SHIELD ASSY	XWZ3005	XWZ3005	
⊗	├DISPLAY ASSY	XWZ3039	XWZ3014	
⊗	├LAMP ASSY	XWZ3024	XWZ3008	
⊗	└LCD ASSY	XWZ3040	XWZ3015	
NSP	$M SERVO BOARD ASSY	AWX7030	AWX7030	
⊗	├CD ASSY	AWZ8427	AWZ8427	
⊗	├MOTOR ASSY	AWZ8428	AWZ8428	
NSP	└SW ASSY	AWZ8429	AWZ8429	

Mark	No.	Description	Part No.

A TRANS ASSY

RESISTOR

	R102		ACN-208

OTHERS

	H101,H102	FUSE CLIP	AKR7001
		TERMINAL	RKC-061

B TRANS 2 ASSY

CAPACITOR

C111		CQMA103K2E

RESISTOR

R111		RF1/4PS100J

Mark	No.	Description	Part No.

C POWER ASSY

SEMICONDUCTORS

⚠	IC1303	(250mA,125V)	AEK7002
⚠	IC1302	(400mA,125V)	AEK7004
	IC1301		STK405-090A
	Q1310,Q1312,Q1313		2SA1048
	Q1301,Q1307-Q1309,Q1311		2SC2458
	Q1303,Q1304		2SD2144S
	Q1305,Q1306		DTA124ES
	D1302-D1304,D1308-D1311		1SS254
	D1312		D3SBA20
	D1305,D1306		MTZJ2.2B

RELAY

	RY1301	SP RELAY	ASR7007

Mark	No.	Description	Part No.
CAPACITORS			
	C1305,C1306		CCCCJ3R0C50
	C1313,C1314		CCCSL221J50
	C1320		CEANP470M16
	C1311,C1312,C1328		CEAT100M50
	C1324		CEAT1R0M50
	C1326		CEAT222M50
	C1315,C1316,C1327		CEAT2R2M50
	C1317,C1318		CEAT330M50
	C1321,C1323		CEAT470M25
	C1308,C1309		CEAT470M50
	C1322		CEAT471M6R3
	C1319		CGCYX104K25
	C1301,C1302		CQMBA104J50
	C1325 (3300µF,50V)		RCH1129
RESISTORS			
	R1305,R1306		RD1/2PM563J
	R1307,R1309		RFA1/4PS101J
	R1301,R1302		RFA1/4PS4R7J
	R1333,R1334		RS2LMFR22J
	Other Resistors		RD1/4PU□□□J
OTHERS			
	CN1301	17P SOCKET	KP200TA17L
	KN1301	EARTH METAL FITTING	VNF1084
	CN1302	8P JUMPER CONNECTOR	KPD8

D POWER ASSY 2

Mark	No.	Description	Part No.
SEMICONDUCTORS			
⚠	IC1004 (400mA,125V)		AEK7004
⚠	IC1003 (2A,125V)		AEK7013
	IC1002		NJM4558D-D
	IC1001		NJM78M05FA
	Q1005		2SA1048
	Q1002		2SA965
	Q1003		2SB1375
	Q1007		2SC2235
	Q1004,Q1008		2SC2458
	Q1001		2SC5196(P)
	Q1006		2SD2012
	D1003-D1007		1SS254
	D1001,D1008		MTZJ20A
	D1002,D1009		MTZJ6.8A
CAPACITORS			
	C1005		CCCSL331J50
	C1006		CCCSL680J50
	C1001,C1002		CEAT100M50
	C1003		CEAT2R2M50
	C1004,C1007		CEAT470M25
	C1008		CKCYB222K50
RESISTORS			
	R1011		RD1/2PM472J
	R1014		RN1/4PC3601F
	R1013		RN1/4PC7501F
	R1017		RS1LMF560J
	Other Resistors		RD1/4PU□□□J

E FM/AM TUNER MODULE

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC6201		LA1832ML
	IC6202		LC72131MD
	Q6402		2SC2223
	Q6203		2SC2705
	Q6201,Q6202		2SC2712
	Q6214,Q6403		2SC2714
	Q6404		2SK302
	Q6401		3SK194
	Q6204		DTA124ES
	Q6205		DTC124EK
	D6202		1SS254
	D6401,D6402		1T363
COILS AND FILTERS			
	L6404	FM COIL	ATC1003
	L6401	FM RF COIL	ATC1020
	L6402	FM RF COIL	ATC1021
	F6204	FM CERAMIC FILTER	ATF-107
	F6203	FM CERAMIC FILTER	ATF-119
	F6401	FM BAND PASS FILTER	ATF-155
	F6206	FM DISCRIMINATOR	ATF7008
	F6202	AM CERAMIC FILTER	ATF7011
	L6206,L6208,L6403		LAU2R2J
TRANSFORMERS			
	T6201	AM IF TRANSFORMER	ATB7008
	T6401	FM MIX TRANSFORMER	ATE7002
CAPACITORS			
	C6208		CCSQCH100D50
	C6212,C6274,C6275,C6408		CCSQCH101J50
	C6221,C6222,C6416		CCSQCH150J50
	C6271		CCSQCH200J50
	C6415		CCSQCH330J50
	C6401,C6419		CCSQCH5R0C50
	C6407		CCSQCK1R0C50
	C6410		CCSQCK2R0C50
	C6413		CCSQPH220J50
	C6414		CCSQPH8R0D50
	C6405		CCSQTH180J50
	C6234,C6235		CEAL1R0M50
	C6245		CEAL470M16
	C6224		CEAS100M50
	C6243		CEAS101M16
	C6231		CEAS1R0M50
	C6227		CEAS220M16
	C6236		CEAS2R2M50
	C6216		CEAS330M16
	C6262		CEAS3R3M50
	C6219		CEAS470M10
	C6244		CEAS470M16
	C6249,C6250,C6265,C6266		CEAS4R7M50
	C6258		CEJA470M16
	C6215		CFTLA103J50
	C6214		CFTLA224J50
	C6211,C6254,C6403,C6406,C6412		CKSQYB102K50
	C6201,C6205,C6210,C6213,C6237		CKSQYB103K50
	C6276,C6278,C6280,C6281,C6402		CKSQYB103K50
	C6409,C6417,C6418		CKSQYB103K50

Mark	No.	Description	Part No.
	C6251,C6252		CKSQYB153K50
	C6203,C6259		CKSQYB223K50
	C6228		CKSQYB472K50
	C6209		CKSQYB473K50
	C6230		CKSQYB821K50
	C6218,C6223,C6255		CKSQYF103Z50
	C6220,C6226,C6242,C6256		CKSQYF223Z50
	C6225		CKSQYF473Z50

RESISTORS

R6280		RD1/4PU101J
R6413,R6416,R6418,R6906,R6909		RS1/8S0R0J
R6401		RS1/8S470J
VR6201(10kΩ)		RCP1045
Other Resistors		RS1/10S□□□J

OTHERS

BN6202		AKE7025
	4P ANTENNA TERMINAL PLATE	
X6202	CERAMIC RESONATOR (456kHz)	ASS1066
X6201	CRYSTAL RESONATOR (7.2000MHz)	ASS1093
CN6201	14P SOCKET	KP200IA14L
	AM RF TUNING BLOCK	AXX7041

F CD ASSY

SEMICONDUCTORS

IC8201	BA5923FP
IC8101	LA9240ML
IC8301	LC78622ED
Q8101	2SA1048
Q8251,Q8252	2SA1560
Q8253,Q8254	2SC4040
D8253	1SS181
D8251,D8252	1SS355

COILS

L8351,L8352	LFA1R0K
L8201,L8371	LFA470J

CAPACITORS

C8145,C8352,C8354,C8356,C8358	CCSQCH101J50
C8361,C8362	CCSQCH101J50
C8132,C8310,C8311	CCSQCH150J50
C8131	CCSQCH300J50
C8129	CCSQCK1R0C50
C8142	CEAL101M6R3
C8127	CEAL1R0M50
C8126,C8139	CEAL470M16
C8135	CEAL4R7M16
C8124	CEALR47M50
C8136	CEAS100M50
C8108,C8251,C8306,C8371	CEAS101M10
C8202	CEAS101M25
C8101	CEAS3R3M50
C8105	CEAS470M16
C8109	CEASR22M50
C8106,C8119,C8133,C8360	CKSQYB102K50
C8102,C8122,C8123,C8130	CKSQYB103K50
C8137,C8138,C8201,C8309,C8312	CKSQYB103K50
C8134,C8302,C8303	CKSQYB104K25

Mark	No.	Description	Part No.
	C8353,C8359		CKSQYB152K50
	C8111		CKSQYB153K25
	C8114,C8117,C8120,C8121		CKSQYB154K16
	C8125		CKSQYB221K50
	C8107		CKSQYB223K50
	C8110		CKSQYB331K50
	C8115,C8128		CKSQYB332K50
	C8113		CKSQYB333K25
	C8112,C8141		CKSQYB334K16
	C8355,C8357		CKSQYB471K50
	C8116,C8140		CKSQYB473K50
	C8118,C8301,C8304,C8305		CKSQYF104Z25

RESISTORS

All Resistors		RS1/10S□□□J

OTHERS

CN8003		52151-0610
	6PJUMPER CONNECTOR	
CN8002	KR CONNECTOR	B6B-PH-K-S
CN8005	3P SIDE POST	BS3P-SHF-1AA
X8301	CERAMIC RESONATOR (16.9344MHz)	DSS1083
CN8004	FFC CONNECTOR 20P	HLEM20R-1
CN8001		SLW15S-1C7
	1.0mm PITCH FFC CONNECTOR	

G MOTOR ASSY

SWITCH

S8503		ASG7009

OTHERS

	MOTOR PULLEY	PNW1634
	CARRIAGE MOTOR	VXM1033

H SW ASSY

SWITCHES

S8502	ASG7009
S8501	DSG1017

OTHERS

J8501		D20PWY0610E
	2mm PITCH JUMPER WIRE 6P	

I DECK ASSY

SEMICONDUCTORS

IC4201	AN7348K
IC4101	BU4094BC
IC4202	NJM4558D-D
Q4303	2SA1048
Q4102,Q4104,Q4106	2SA1560
Q4301,Q4302	2SC1845
Q4356	2SC2240
Q4353,Q4354	2SC4040
Q4221,Q4222,Q4355	2SD2144S
Q4111,Q4112	DTA124ES

Mark	No.	Description	Part No.
	Q4223		DTA143ES
	Q4101,Q4103,Q4105,Q4224		DTC143ES
	D4104,D4110-D4115,D4301-D4303		1SS254

COILS

	L4351	OSCIRATION COIL	ATX7002
	L4301	COIL (1mH)	RTF1013

CAPACITORS

	C4211,C4212	CCCSL151J50
	C4360	CEAT100M50
	C4207,C4208,C4305	CEAT101M10
	C4215,C4216,C4237,C4238,C4254	CEAT1R0M50
	C4213,C4214,C4225,C4226	CEAT2R2M50
	C4229,C4230,C4235,C4236,C4253	CEAT2R2M50
	C4102,C4252,C4352,C4357,C4358	CEAT330M25
	C4232,C4304	CEAT4R7M50
	C4218,C4219	CGCYX333K25
	C4201,C4202	CKCYB102K50
	C4103,C4227,C4228	CKCYB222K50
	C4353,C4354	CKCYB332K50
	C4203,C4204	CKCYB471K50
	C4355	CKCYB472K50
	C4361	CKCYB681K2H
	C4104	CKCYB681K50
	C4301	CKCYB821K50
	C4303	CKCYF223Z50
	C4251	CQMBA104J50
	C4356	CQMBA223J50
	C4221,C4222	CQMBA273J50
	C4209,C4210,C4233	CQMBA393J50
	C4302	CQPA222J2A
	C4359	CQPA822J2A

RESISTORS

	R4101,R4103,R4105	RD1/2PM102J
	R4361,R4362	RD1/2PM820J
	VR4351 (22kΩ)	RCP1103
	VR4101 (10kΩ)	RCP1140
	Other Resistors	RD1/4PU□□□J

OTHERS

CN4152		52147-1010
	10P JUMPER CONNECTOR	
CN4151		52147-1610
	16P JUMPER CONNECTOR	
CN4003	KR CONNECTOR	B2B-PH-K-S
CN4001	KR CONNECTOR	B3B-PH-K-R
CN4002	KR CONNECTOR	B4B-PH-K-S

J SHIELD ASSY

No service part

Mark	No.	Description	Part No.

K AF ASSY

(1) CONTRAST TABLE

XWM3024 and XWM3004 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		XWM3024	XWM3004	
	Q2162	2SC2458	Not used	
	C2164	CEAT2R2M50	Not used	
	R2165	RD1/4PU473J	Not used	
	R2166	RD1/4PU333J	Not used	
	R2167	RD1/4PU824J	Not used	

(2) PARTS LIST FOR XWM3024

SEMICONDUCTORS

	IC2101	LC75394NED
	IC2203	NJM4558D-D
	IC1051	NJM78M12FA
	Q1056,Q2161,Q2162	2SC2458
	D2101-D2103,D2161,D2171	1SS254
	D1056	MTZJ15A
	D1055	MTZJ20A

COILS

	L1052,L1054	AF CHOKE COIL	ATH-133
	L2101		LAU1R0J

CAPACITORS

	C2123,C2124	CCCSL101J50
	C2111,C2112	CEASR68M50
	C1056-C1058,C2161	CEAT100M50
	C1059	CEAT101M10
	C2162	CEAT1R0M50
	C2141	CEAT221M10
	C2101-C2104,C2107-C2109	CEAT2R2M50
	C2125,C2126,C2134,C2163,C2164	CEAT2R2M50
	C2239,C2240	CEAT2R2M50
	C2121,C2122,C2142	CEAT470M25
	C2255	CKCYB102K50
	C1062,C1063,C1067,C1070	CKCYB152K50
	C2171,C2172,C2184,C2260	CKCYB152K50
	C2119,C2120	CKCYB472K50
	C2131,C2132	CKCYB682K50
	C2117,C2118	CQMBA222J50
	C2113,C2114	CQMBA393J50
	C2115,C2116	CQMBA563J50

RESISTORS

	R1063,R1065	RD1/4PMF4R7J
	Other Resistors	RD1/4PU□□□J

OTHERS

CN1201	4P SPEAKER TERMINAL	AKE7035
CN1052	FFC CONNECTOR 20P	HLEM20R-1
CN1053	FFC CONNECTOR 40P	HLEM40S-1
CN1054	14P PLUG	KM200IB14
CN1051	17P PLUG	KM200TA17
JA2101	2P PIN JACK	VKB1050

Mark	No.	Description	Part No.

L CD SW ASSY

SEMICONDUCTORS

	D1806	SLP3118C51H
	D1807	SLP7118C51H
	D1805	SLP9118C51H

SWITCHES

	S1830-S1834	ASG1051

RESISTORS

	All Resistors	RD1/4PU□□□J

M DISPLAY ASSY

(1) CONTRAST TABLE

XWZ3039 and XWZ3014 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		XWZ3039	XWZ3014	
	S1802	ASX7017	Not used	
	S1825	Not used	ASG1051	
	R1816, R1817	RD1/4PU473J	Not used	

(2) PARTS LIST FOR XWZ3039

SEMICONDUCTORS

	IC1801	BU2092F
	D1808,D1809	MTZJ6.8A
	D1801-D1804	SLP9118C51H

COILS

	L1250,L2552	LAU1R0K

SWITCHES

	S1811-S1824	ASG1051
	S1801,S1802	ASX7017

CAPACITORS

	C1804	CKCYB102K50
	C2555	CKPUYB102K50
	C1202,C1203,C1801,C1807	CKPUYF103Z25

RESISTORS

	R1201,R1202	RS1LMF331J
	Other Resistors	RD1/4PU□□□J

OTHERS

	JA1201 STEREO MINI JACK	AKN7005
	REMOTE RECEIVER UNIT	GP1U27X

Mark	No.	Description	Part No.

N LAMP ASSY

(1) CONTRAST TABLE

XWZ3024 and XWZ3008 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		XWZ3024	XWZ3008	
	Q1841	2SA1560	Not used	
	Q1842	2SC4040	Not used	
	D1841, D1842	1SS254	Not used	
	R1841	RD1/4PU471J	Not used	
	R1842	RD1/4PU472J	Not used	
	R1843	RD1/4PU102J	Not used	
	R1845	RS2LMF151J	Not used	
	PL1901, PL1902 Sub Miniature Lamp (0.15A,12V)	AEL7007	Not used	

(2) PARTS LIST FOR XWZ3024

SEMICONDUCTORS

	Q1841	2SA1560
	Q1842	2SC4040
	D1841,D1842	1SS254

RESISTORS

	R1845	RS2LMF151J
	Other Resistors	RD1/4PU□□□J

OTHERS

	PL1901,PL1902	AEL7007
	SUB MINIATURE LAMP (0.15A,12V)	
	PL1903,PL1904	AEL7008
	SUB MINIATURE LAMP (0.15A,12V)	

Mark	No.	Description	Part No.

O LCD ASSY

(1) CONTRAST TABLE

XWZ3040 and XWZ3015 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		XWZ3040	XWZ3015	
	D1907	1SS254	Not used	
	C1917	CKCYB102K50	Not used	

(2) PARTS LIST FOR XWZ3040

SEMICONDUCTORS

IC1901	PDC042A
Q1911	DTC143ES
D1901,D1904,D1905,D1907	1SS254
D1911-D1916	1SS254
D1902	MTZJ4.7B

COIL

L1901	LAU220J

CAPACITORS

C1903 (0.047F)	ACH7013
C1911	CEAT100M50
C1906	CEAT330M25
C1910	CGCYX104K25
C1909,C1917	CKCYB102K50
C1904,C1912	CKCYF103Z50
C1905	CKCYF473Z50
C1913-C1915	CKPUYF103Z25
C1916	CKPUYX222M16

RESISTORS

R1925	RD1/4PM103J
R1954,R1955	RN1/4PC1001F
Other Resistors	RD1/4PU□□□J

OTHERS

CN1902	FFC CONNECTOR 40P	HLEM40R-1
X1901	CERAMIC RESONATOR (6.00MHz)	VSS1045
	LT FILTER	XAK3010
V1701	LCD DISPLAY	XAV3001

6. ADJUSTMENT

6.1 TUNER SECTION

■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1.

Step No.	Adjustment Title	FM SG (1kHz, ± 75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Front End Sensitivity	98	0-30	98MHz	L6402 T6401	Adjust so that the DC voltage between the IC6201-pin 20 and GND becomes at maximum level.
2	TUNED IND. Lighting Level	98	18 ± 2	98MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

Note:
Before adjusting, make sure there is no gap between L6401 and L6402. If there is a gap between them, bring them into contact with each other first, and then make adjustments.

■ AM Tuner Section

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	Front End Sensitivity	999 (∗1)	35-45	999kHz (∗1)	T6201	Adjust so that the DC voltage between the IC6201-pin 20 and GND becomes at maximum level.

Note (∗1): For the area using 10kHz step, frequencies should be 1000kHz.

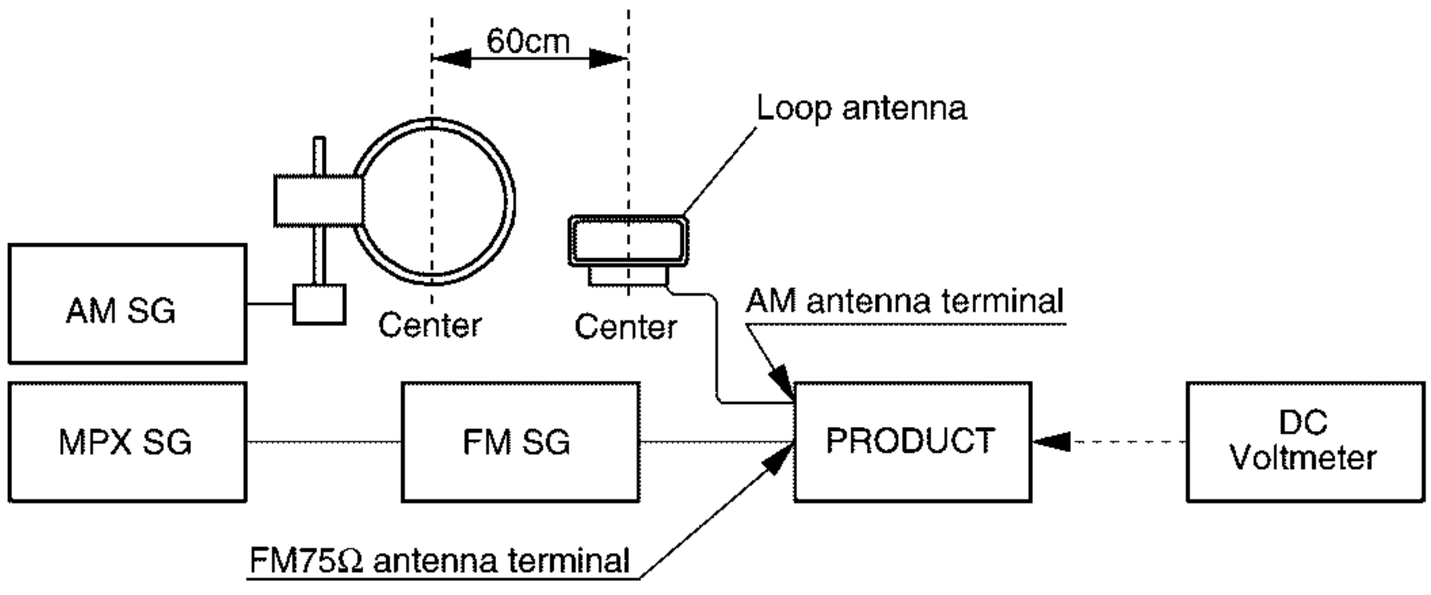


Fig. 1 AM and FM Adjustment Wiring Diagram

FM/AM TUNER MODULE

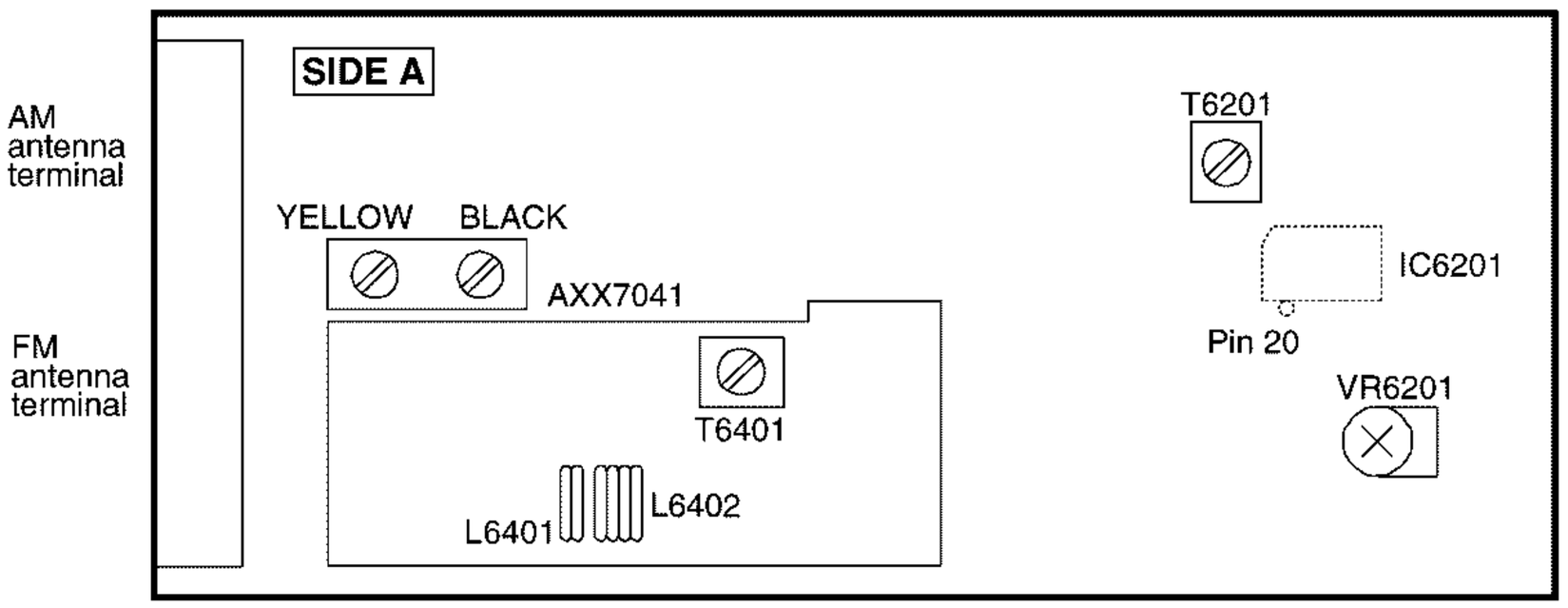


Fig. 2 Adjustment Point

6.2 CASSETTE DECK SECTION

● Adjustment points and test points are shown in Fig. 4 and Fig. 5.

■ Mechanical Adjustment

● Test tape: NCT-111 (3kHz, 30min).

1. Tape Speed Adjustment

No.	Mode	Test Tape	Adjusting Points	Measurement Points	Adjustment Procedure	Remarks
1	Deck I PLAY	NCT-111 (Playback : 3kHz)	VR4101 (DECK Assy)	PB OUT POINT (Rch) (AF Assy)	Press the PLAY SW and adjust so that the reading becomes 3000Hz ± 20Hz. Confirm that wow & flutter level is below 0.2% (in the reverse direction, confirm that the reading is within 3000Hz ± 60Hz).	

■ Electrical Adjustment

Check the following before starting.

(1) Confirm that the tape speed adjustment has been completed.
(2) Clean the heads and demagnetize them using a head eraser.
(3) Set the measurement level to 0 dBV = 1 Vrms.
(4) Use the specified tape for adjustment. Use the labeled (A) side of the test tape.
STD-331E : For playback check
STD-632 : Normal blank tape
(5) Provide yourself with the following measuring devides:
- AC voltmeter (Noisemeter : filter off)
- AC millivoltmeter
- Low-frequency oscillator
- Attenuator
- Oscilloscope

(6) Adjust both right and left channels unless otherwise specified.
(7) Warm up the unit for several minutes before adjustment. In particular, be sure to warm up the unit in the REC/PLAY mode for 3 to 5 minutes before starting recording/playback frequency characteristics adjustment.
(8) Always follow the indicated adjustment order. Otherwise, a complete adjustment may not be achieved.

Playback Adjustment (Decks I and II)

(1) Head Azimuth Adjustment

Recording Adjustment (Deck II)

(1) Bias Oscillation Frequency Adjustment
(2) Recording Bias Adjustment
(3) ALC Operation Check

* As the reference recording level is 250nwb/m for STD-331E, the recording level will be higher by 4 dB for STD-331B (160nwb/m). When adjusting, pay carefull attention to the type of tape used.

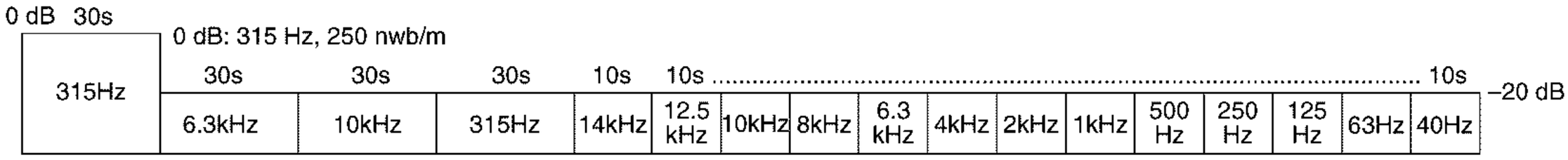


Fig. 3 STD-331E Test Tape

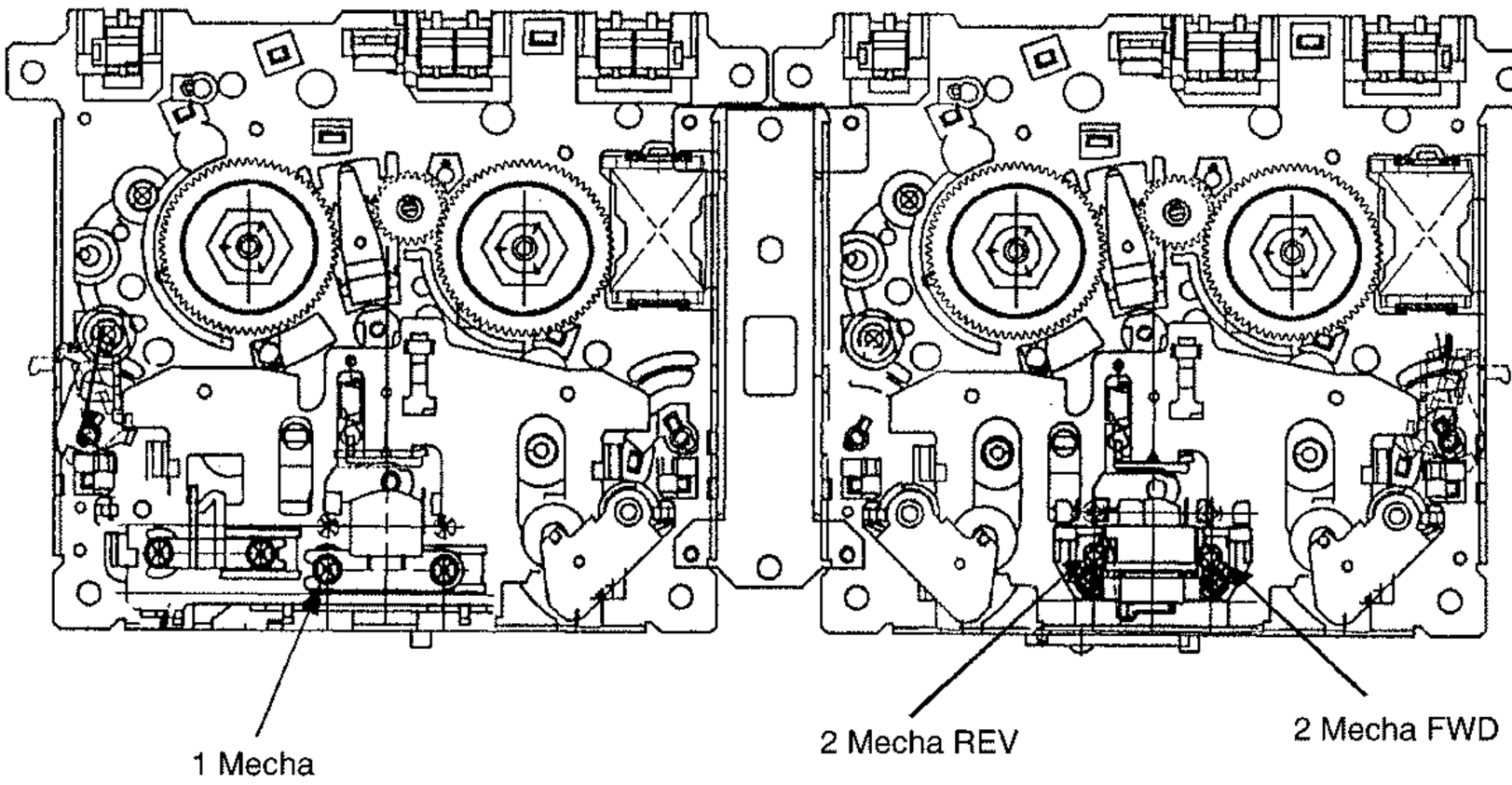


Fig. 4 Head Azimuth Adjustment Screw

■ Playback Adjustment

(1) Head Azimuth Adjustment

● Do not switch between forward and reverse operation with the screwdriver inserted.

Step	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	PLAY	STD-331E test tape (Playback: 10kHz, -20dB)	Deck I Deck II	Head azimuth adjustment screw (Fig. 4)	DECK PB OUT (L, Rch) (AF Assy)	Max. playback signal level	After adjustment, apply silicon bond to the head azimuth adjustment screw.

■ Recording Adjustment

(1) Bias Oscillation Frequency Adjustment

Step	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	REC	Load the STD-632 test tape and set the recording mode.	Deck I	———	———	Oscillation frequency to be 105.0kHz ± 2kHz.	If the ASES/COPY button for four seconds while the power is in STAND BY mode, the frequency will decrease 2-3 kHz.
			DECK II	L4351 (DECK Assy)	Between Ⓐ point in Fig. 5 and GND.		

(2) Recording Bias Adjustment

● Since this adjustment affects recording bias, prevent distortion from increasing due to underbias.

Step	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	REC → PLAY	Load the STD-632 test tape. Record the 315Hz and 10kHz signals at 25.2dBV input level and playback.	Deck I	———	DECK PB OUT (L, Rch) (AF Assy)	Repeat adjustment until playback level of the 10kHz signal is within 0 ± 0.5dB from that of the 315Hz signal.	
			DECK II	VR4351 (DECK Assy)			
2	REC	Load the STD-632 test tape and record (No signal)	Deck II	VR4351 (DECK Assy)	TP BIAS V POINT (DECK Assy)	23V-26V	

(3) ALC Operation Check

Step	Mode	Input Signal/Test Tape	Adjusting Points	Measurement Points	Adjustment Value	Remarks
1	REC	Input a 315Hz signal to the AUX terminal and set the input selector to AUX.	Input signal level	DECK PB OUT (L, Rch) (AF Assy)	-8.2dBV	
2			Set to a level +10dB adove the input level at step1.		Confirm that the reading is -3.2 ± 2.5dBV	

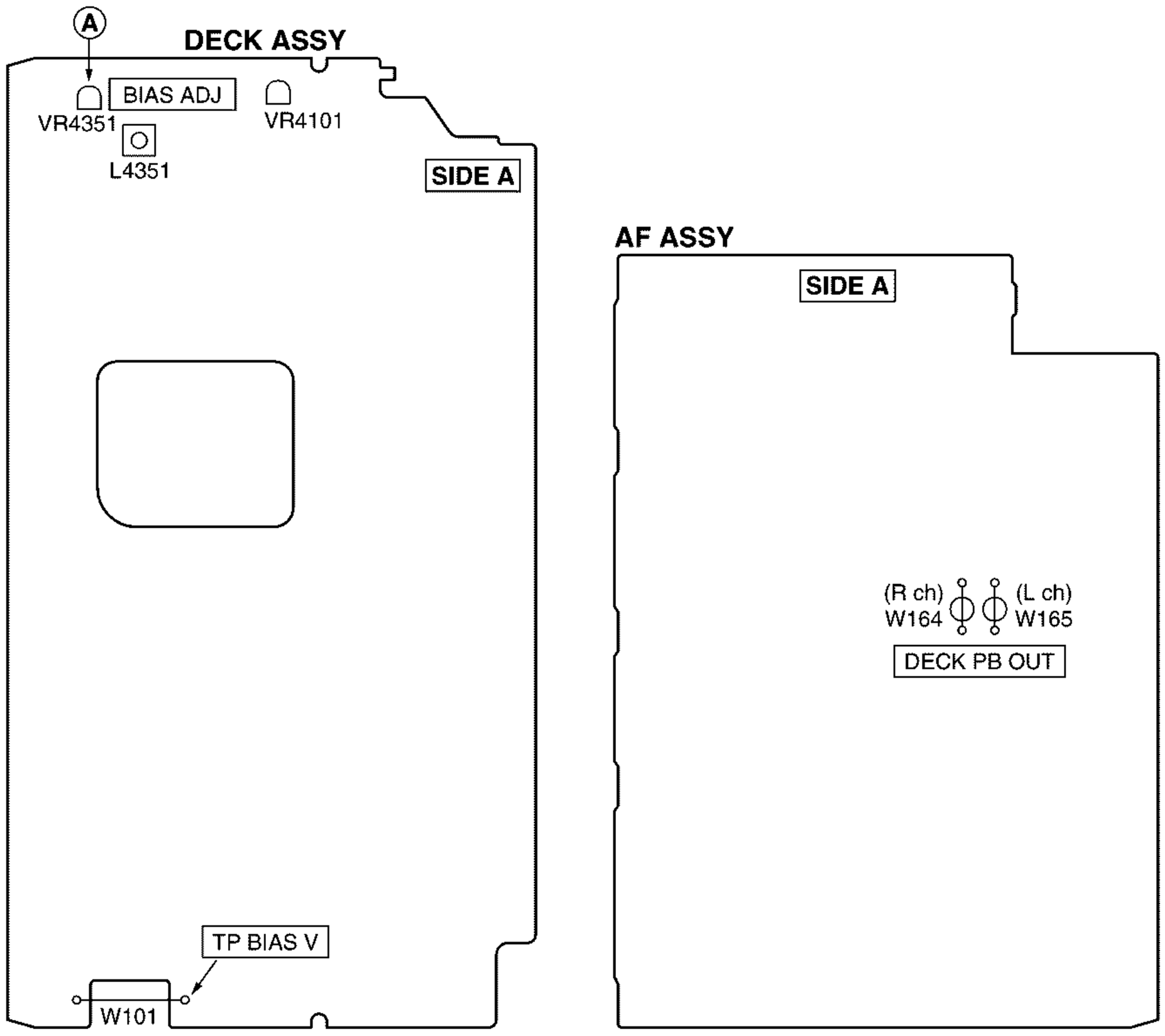


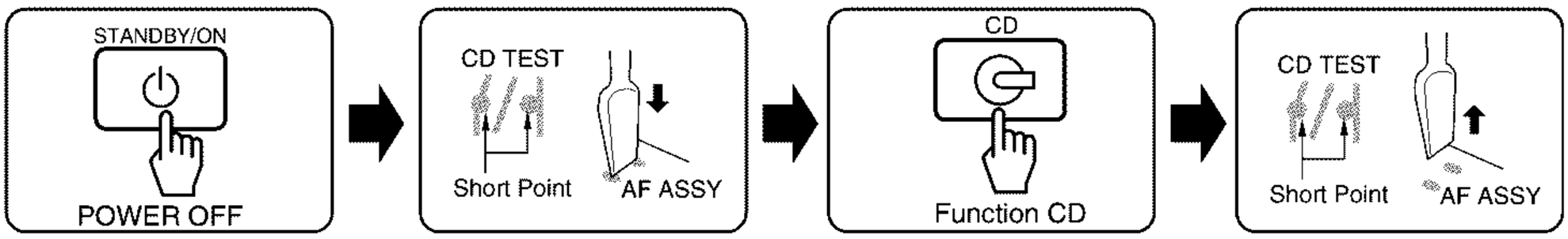
Fig. 5 Adjustment Points

6.3 TEST MODE

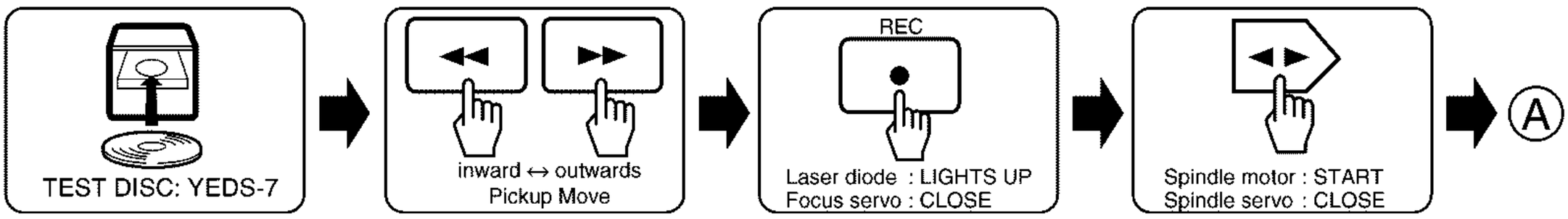
NOTE: There is no information to be shown in this CD adjustment.

■ How to Start/Cancel Test Mode

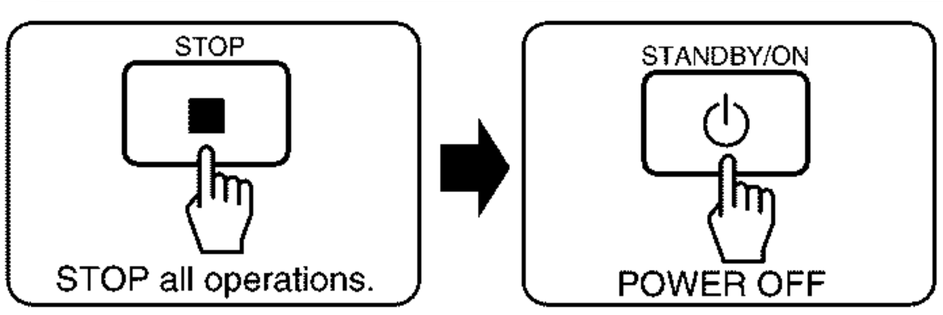
TEST MODE : ON



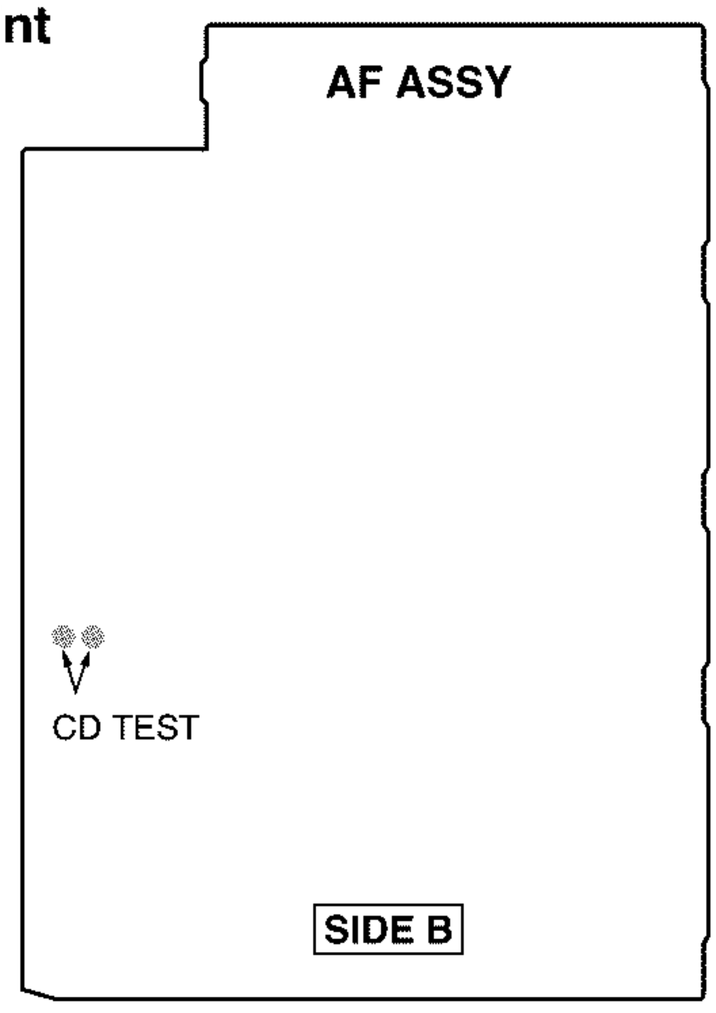
TEST MODE : PLAY



TEST MODE : STOP → CANCEL



■ Test Point



7. GENERAL INFORMATION

7.1 PARTS

7.1.1 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDC042A (LCD ASSY : IC1901)

• System Control Microcomputer

●Pin Function

No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
1	KI 3	O	Key scan output	36	MUTE	O	Power amp mute
2	KI 4			37	PLL CE	O	Tuner PLL enable
3	S DO	O	Serial data output (E– VR/TX)	38	N. C.	–	Not used
4	S DI	I	Serial data input (TX)	39	SEG39	O	LCD segment
5	S CLK	O	Serial clock (E– VR/TX)	40	SEG38		
6	CD DATA	O	Serial data output (CD)	41	SEG37		
7	CD SQOUT	I	Sub Q 80-bit input	42	SEG36		
8	CD CLK	O	Serial clock (CD)	43	SEG35		
9	JOG1 (A200) N. C. (A100)	I	Morphing jog pulse input 1 (A200) Not used (A100)	44	SEG34		
10	JOG2 (A200) N. C. (A100)	I	Morphing jog pulse input 2 (A200) Not used (A100)	45	SEG33		
11	AC50/60	I	AC pulse judgement	46	SEG32		
12	XRESET	I	"L" reset (microcomputer)	47	SEG31		
13	TAPE PULSE2	I	Tape 2 reel pulse signal	48	SEG30		
14	TAPE PULSE1	I	Tape 1 reel pulse signal	49	SEG29		
15	Vss	–	GND	50	SEG28		
16	CF1	I	Ceramic resonator (6MHz)	51	SEG27		
17	CF2	O		52	SEG26		
18	VDD	–	V+5V	53	SEG25		
19	ST. /TUN. /DC.	I	A/D port for TX & DC level	54	SEG24		
20	LEVEL	I	A/D port for level meter	55	SEG23		
21	MS (A200) N. C. (A100)	I	A/D port for TAPE MS (A200) Not used (A100)	56	VDD	–	V+5V
22	KEY1	I	A/D port for key input	57	Vss	–	GND
23	KEY2			58	SEG22	O	LCD segment
24	17V FAIL	I	A/D port for voltage detection	59	SEG21		
25	ROT ENC1	I	Volume jog pulse 1	60	SEG20		
26	ROT ENC2	I	Volume jog pulse 2	61	SEG19		
27	N. C.	–	Not used	62	SEG18		
28	CD WRQ	I	Sub Q stand-by	63	SEG17		
29	REMOCON	I	Remote control signal input	64	SEG16		
30	BEAT CUT	O	Beat cut control	65	SEG15		
31	XKARA	O	ALC control	66	SEG14		
32	N. C.	–	Not used	67	SEG13		
33	EXP CE	O	(LED/DECK) enable for IC1801/4101	68	SEG12		
34	DATA	O	Serial output for expansion IC	69	SEG11		
35	CLK	O	Serial clock for expansion IC	70	SEG10		

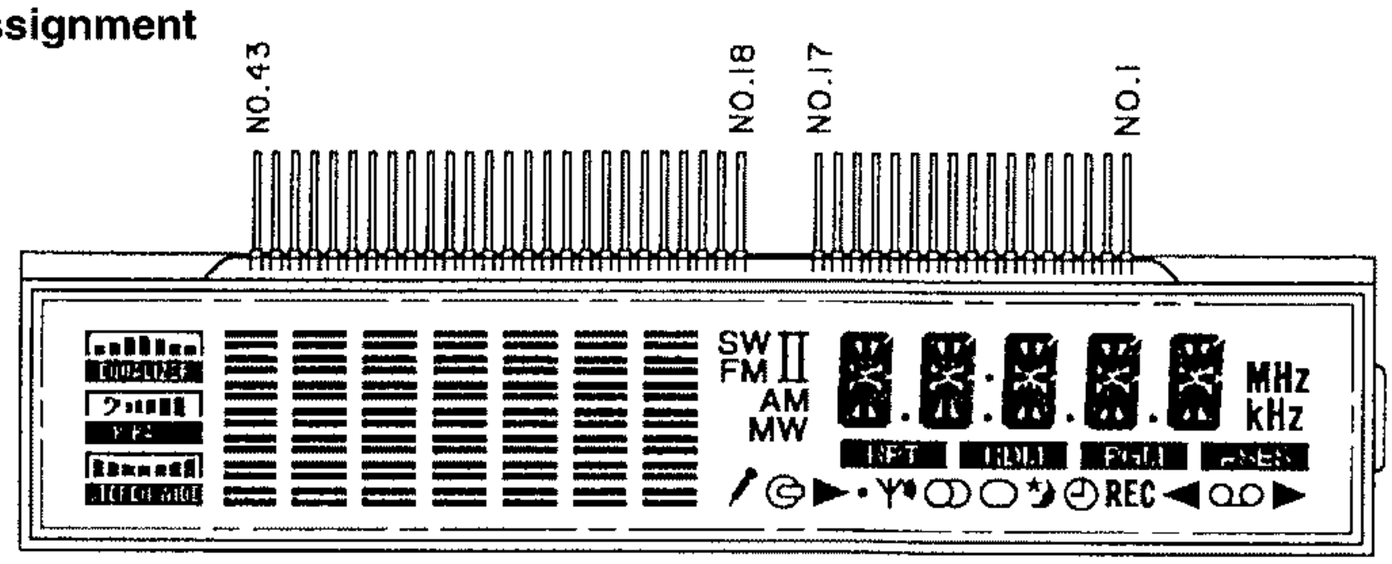
No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
71	SEG9	O	LCD segment	86	COM4	O	LCD common
72	SEG8			87	CD RESET	O	CD reset
73	SEG7			88	CD CE	O	CD enable
74	SEG6			89	Vss	–	GND
75	SEG5			90	VDD	–	V+5V
76	SEG4			91	BA3838	O	Vocal fader IC control
77	SEG3			92	N. C.	–	Not used
78	SEG2			93	TX MUTE	O	IF buffer ON/OFF
79	SEG1			94	E-VR CE	O	Pre-amp enable for VOL IC
80	CD DRF	I	Focus (RF– LEVEL) OK	95	SW1	I	Key scan input
81	CD CS	I	(CD-DSP chip select) (Built-in pull-down at DSP side)	96	SW2		
82	GND	–	GND	97	SW3		
83	COM1	O	LCD common	98	SW4		
84	COM2			99	KI2	O	Key scan output
85	COM3			100	KI1		

7.1.2 DISPLAY

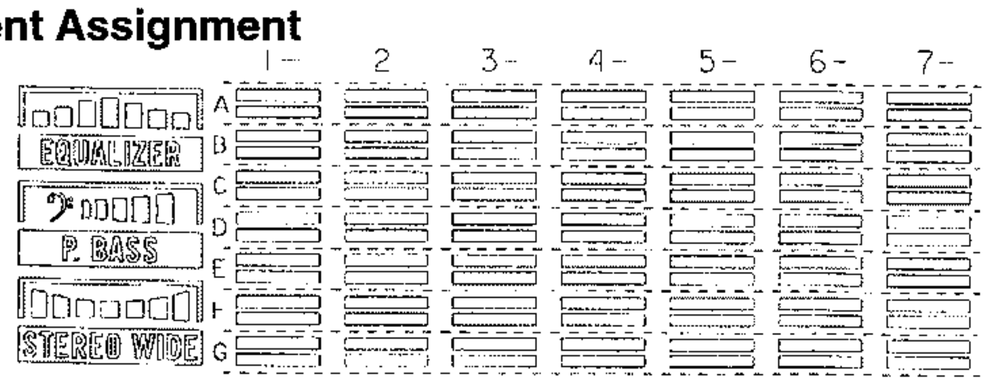
■ XAV3001 (LCD ASSY : V1701)

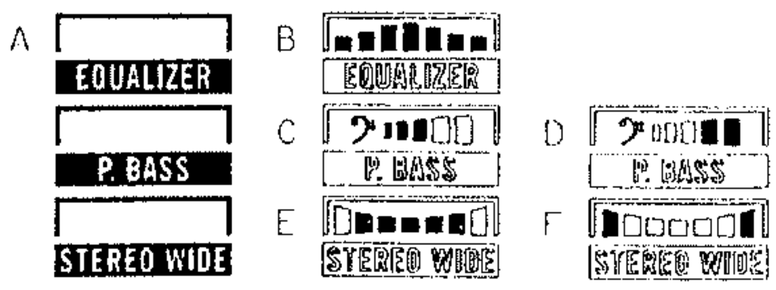
• LCD Display

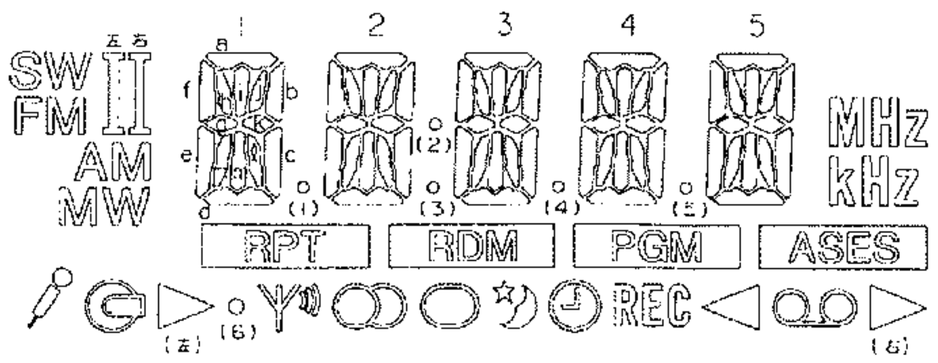
●Pin Assignment



●Segment Assignment







●Pin Connection

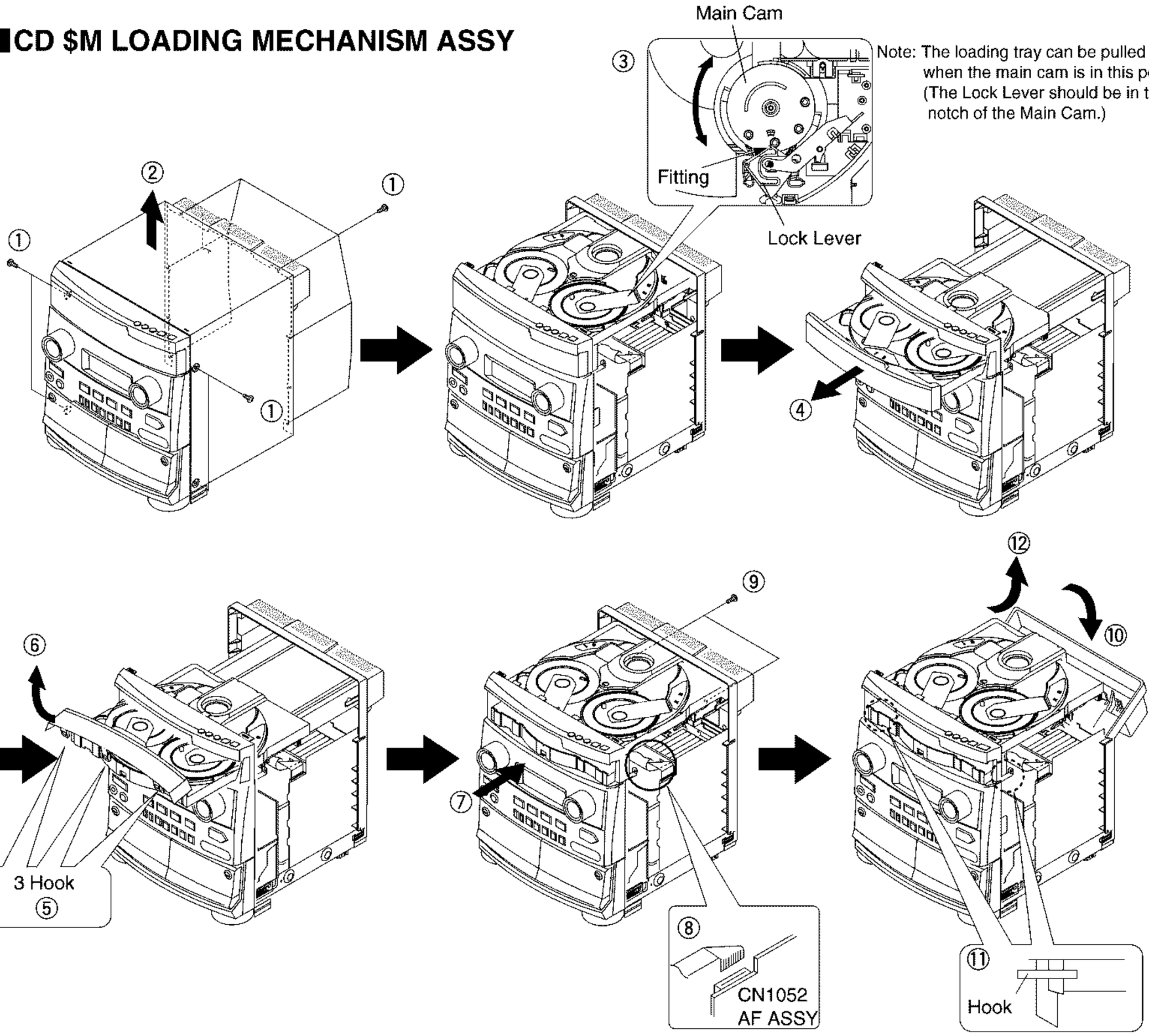
NO.	COM.1	COM.2	COM.3	COM.4
1				COM.4
2			COM.3	
3		COM.2		
4	COM.1			
5	MHz	KHz	ASES	▷(お)
6	5b	5k	5c	∞
7	5j	5i	5m	5l
8	5a	5h	5g	5n
9	○(5)	5f	5e	5d
10	4b	4k	4c	PGM
11	4j	4i	4m	4l
12	4a	4h	4g	4n
13	○(4)	4f	4e	4d
14	3b	3k	3c	REC
15	3j	3i	3m	3l
16	3a	3h	3g	3n
17	◴	3f	3e	3d

NO.	COM.1	COM.2	COM.3	COM.4
18	♫	○(2)	○(3)	RDM
19	2b	2k	2c	∞
20	2j	2i	2m	2l
21	2a	2h	2g	2n
22	○(1)	2f	2e	2d
23	1b	1k	1c	RPT
24	1j	1i	1m	1l
25	1a	1h	1g	1n
26		1f	1e	1d
27	▯(お)	MW	▷(左)	○(6)
28	▯(左)	AM	◶	♈
29	SW	FM	♪	○
30	7-A	7-B	7-C	7-D
31	6-A	6-B	6-C	6-D
32	5-A	5-B	5-C	5-D
33	4-A	4-B	4-C	4-D
34	3-A	3-B	3-C	3-D
35	2-A	2-B	2-C	2-D
36	1-A	1-B	1-C	1-D
37	F	4-G	4-F	4-E
38	E	3-G	3-F	3-E
39	B	1-G	1-F	1-E
40	A	2-G	2-F	2-E
41	C	7-G	7-F	7-E
42	D	6-G	6-F	6-E
43	◁	5-G	5-F	5-E

7.2 DIAGNOSIS

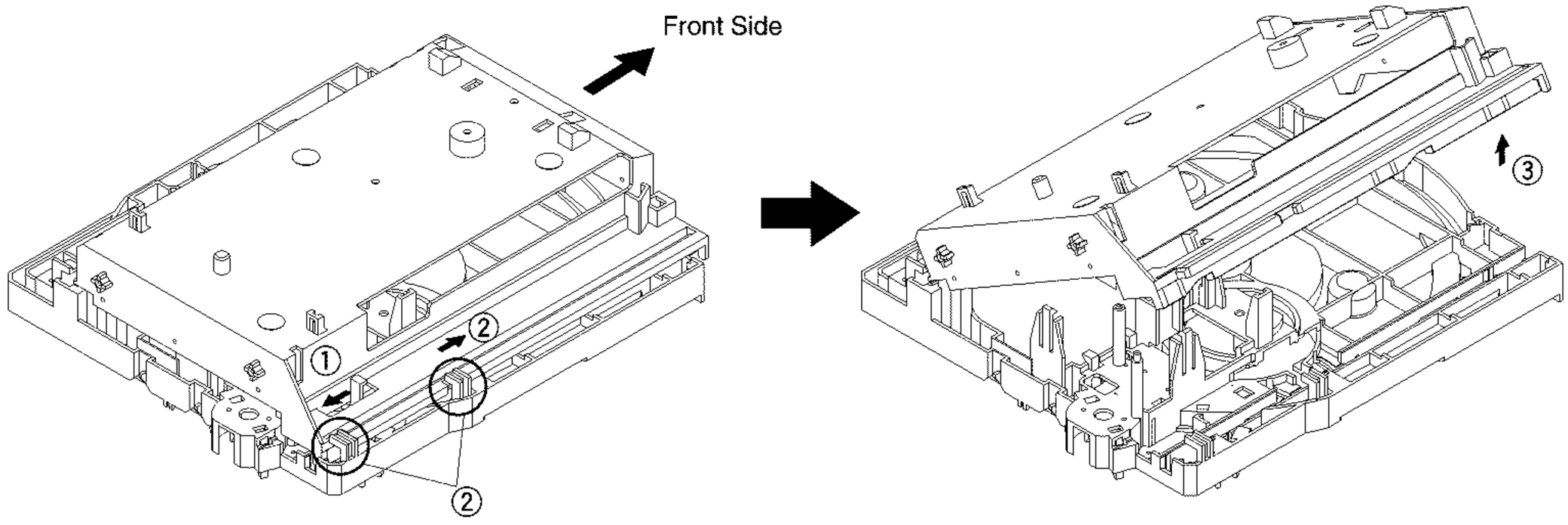
7.2.1 DISASSEMBLY

■CD $M LOADING MECHANISM ASSY

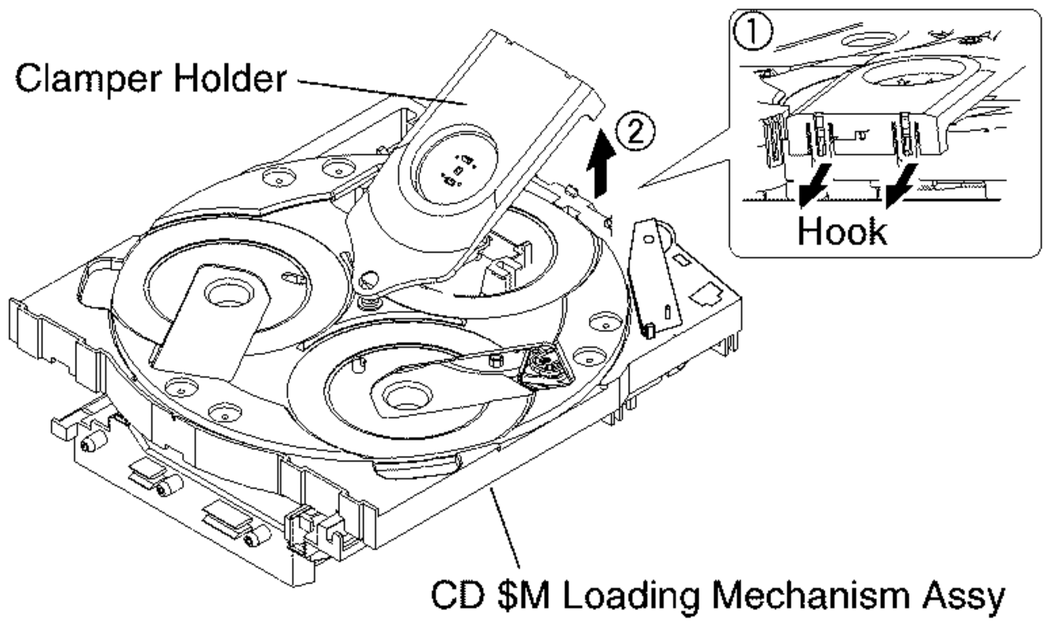


■CD $M LOADING MECHANISM ASSY ADDITIONAL TO JOB

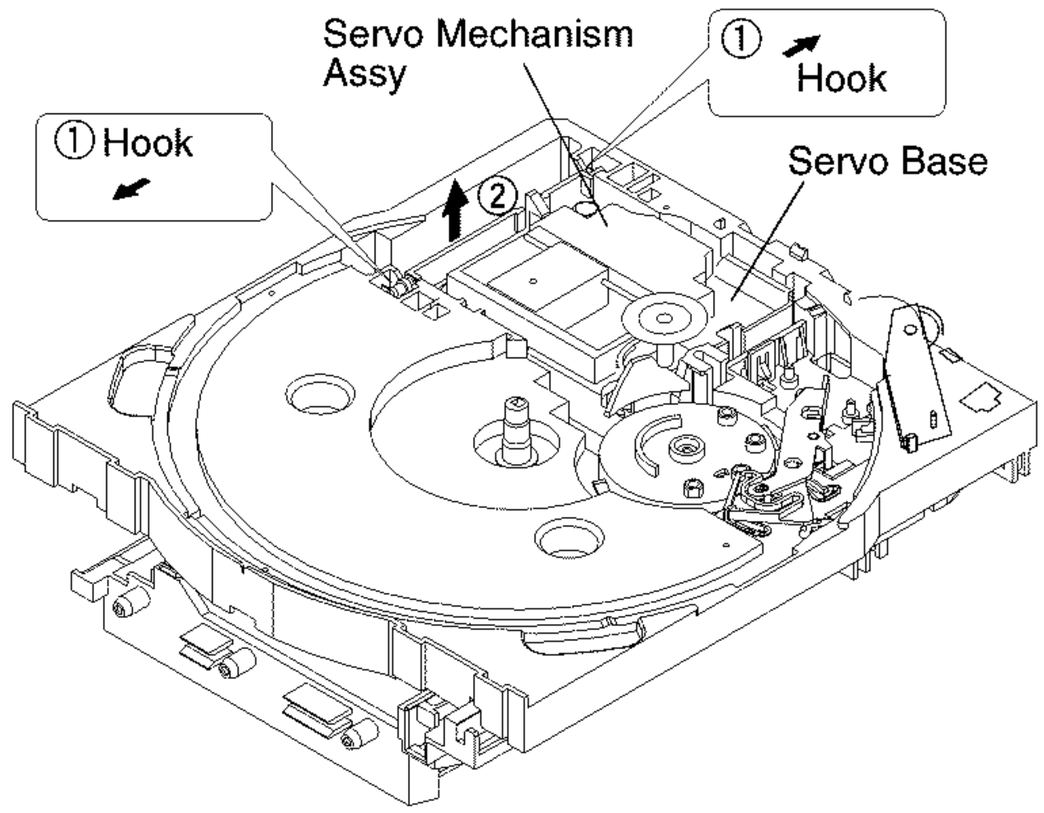
● **Mechanism Base (Bottom View)**



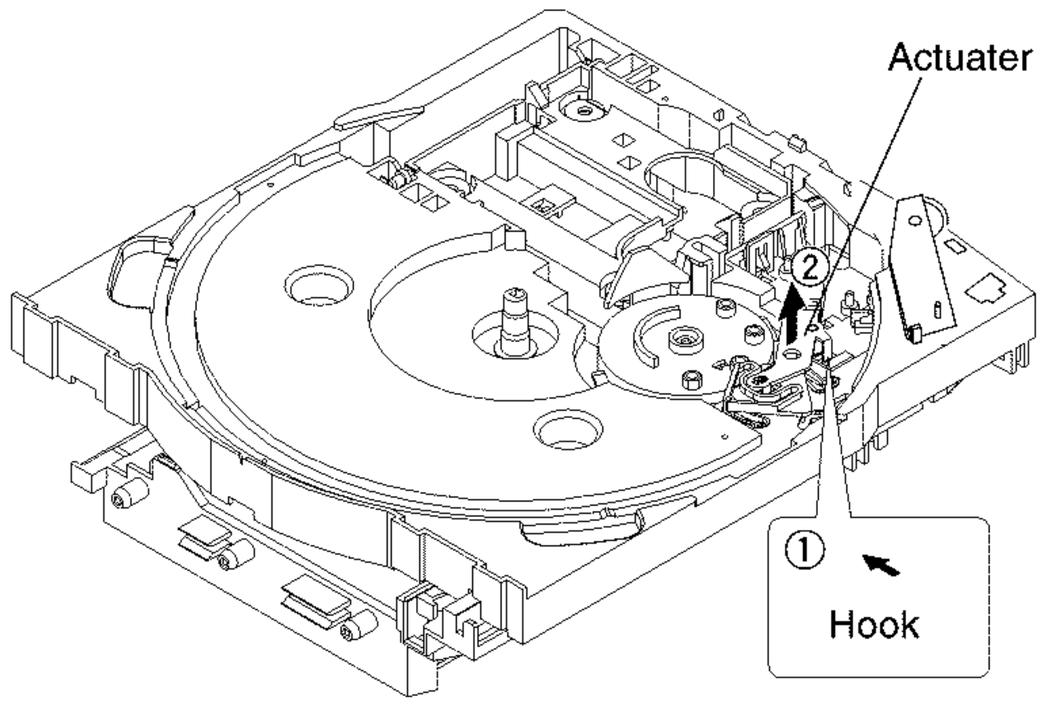
● **Clamper Holder**



● **Servo Base**

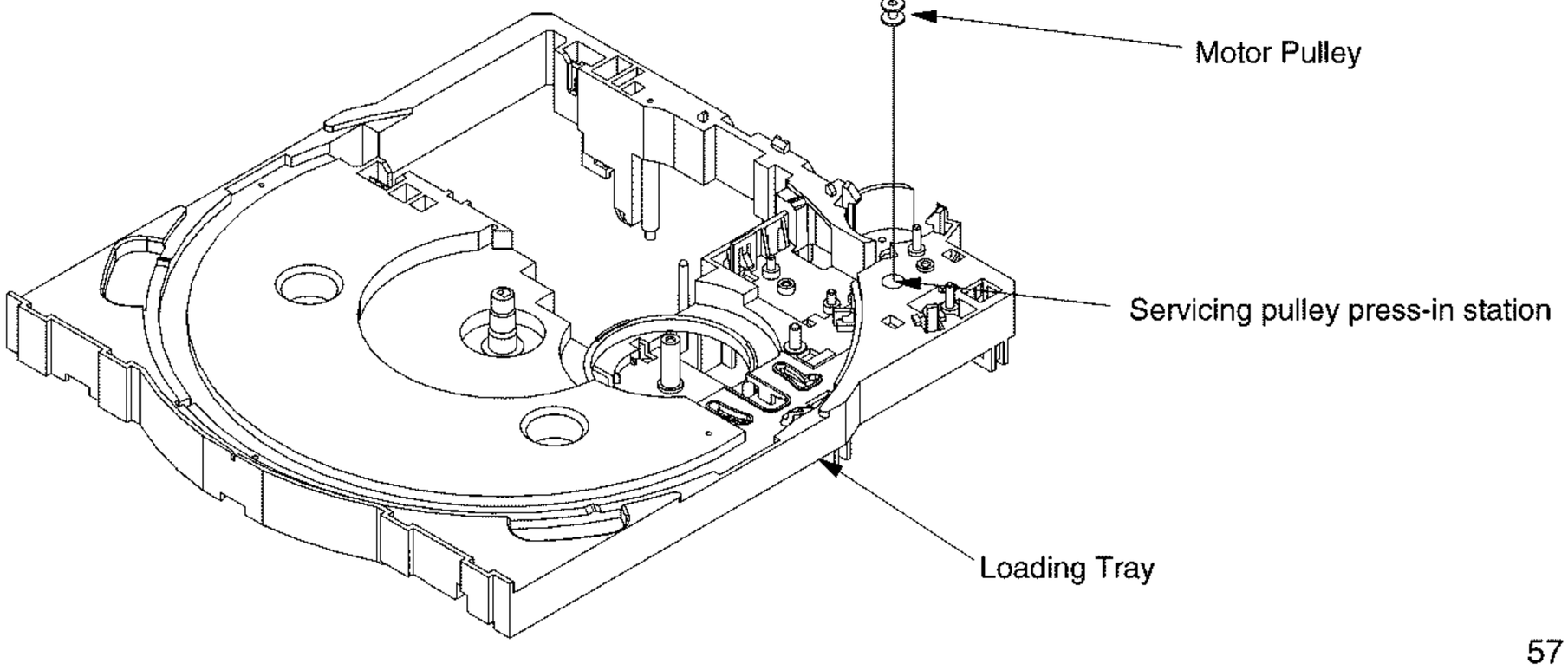


● **Actuater**



■FITTING THE PULLEY INTO THE CARRIAGE MOTOR

For replacement of the carriage motor, fit the motor pulley by using the servicing pulley press-in station located on the loading tray, as shown in the figure on the right.



7.2.2 TROUBLESHOOTING

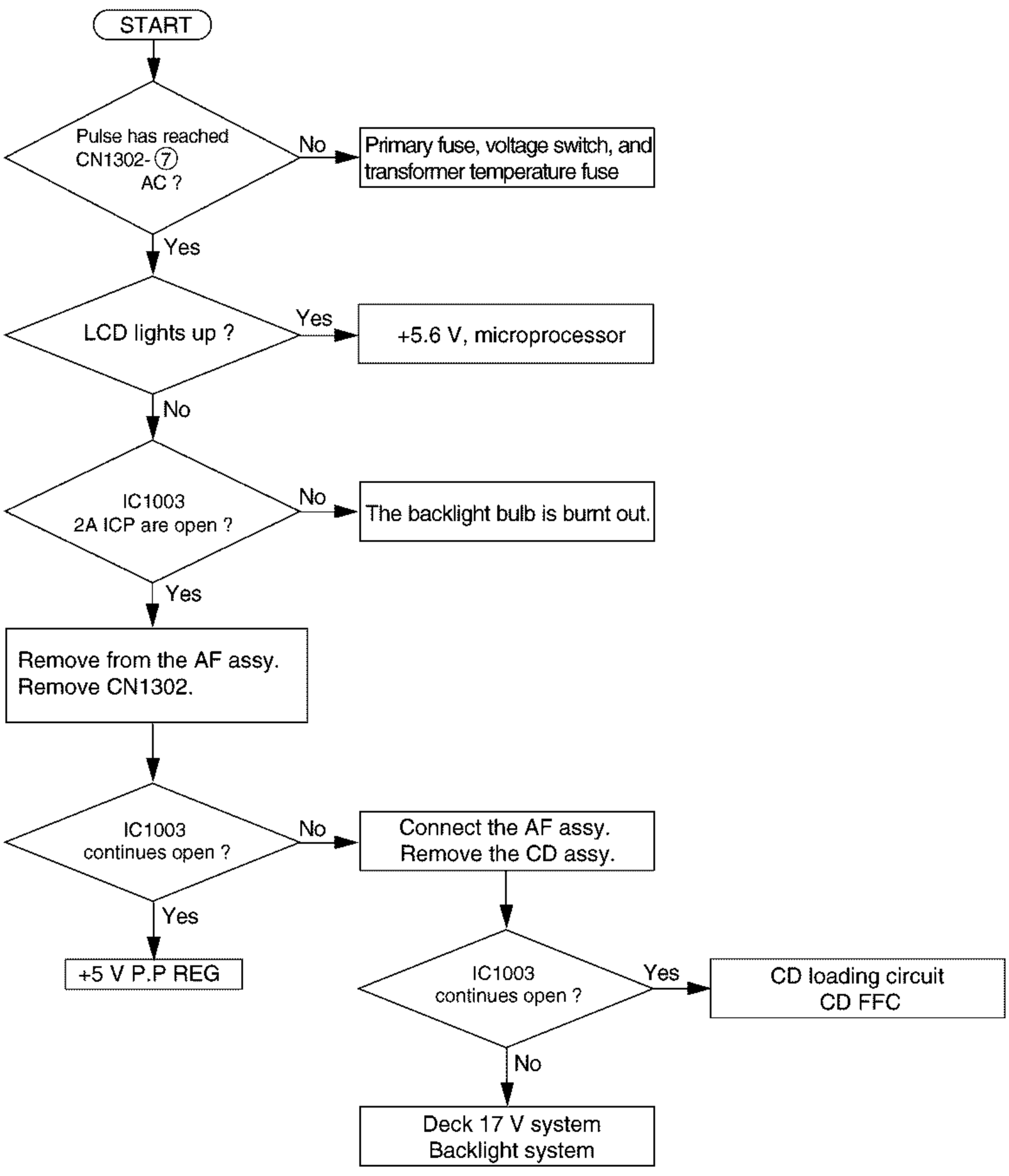
Note Do not short-circuit IC1003 and IC1004 (ICP) for diagnosis. If the regulator is damaged by short circuit in ICP, the parts will be damaged to a wide extent of setting, making repair difficult.

■ List of Error Codes

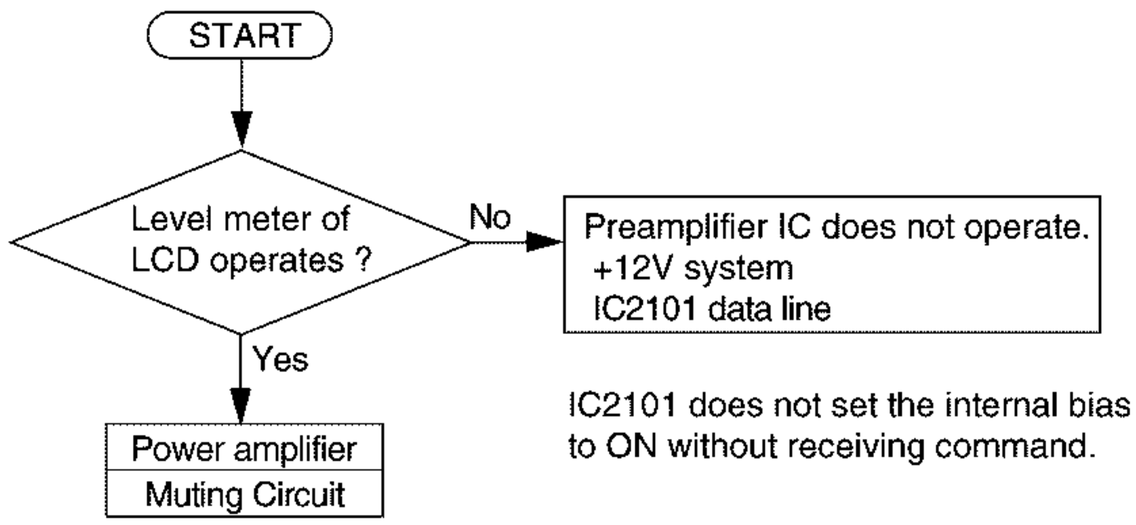
An error code will be displayed in the LCD.

ERROR CODE	CAUSE	POINT TO BE CHECKED
E.1 : DC DET	DC appears in the SP terminal.	Defective IC1302, IC1303.
	Vp +17.5V is over 20V.	Improper operation of the regulator.→ See "Can not Change from +17V".
	Current passes toward the chassis.	Mica Sheet
E.2 : Vp	Vp is below 6V or over 20V.	Regulator
E.3 : DECK I	Initialization could not be made.	Output of +17V and +6V SINK may be improper.
E.4 : DECK II		Reel pulse may be improper.
		Deck mechanism lock (Lights up E.3 and E.4.)

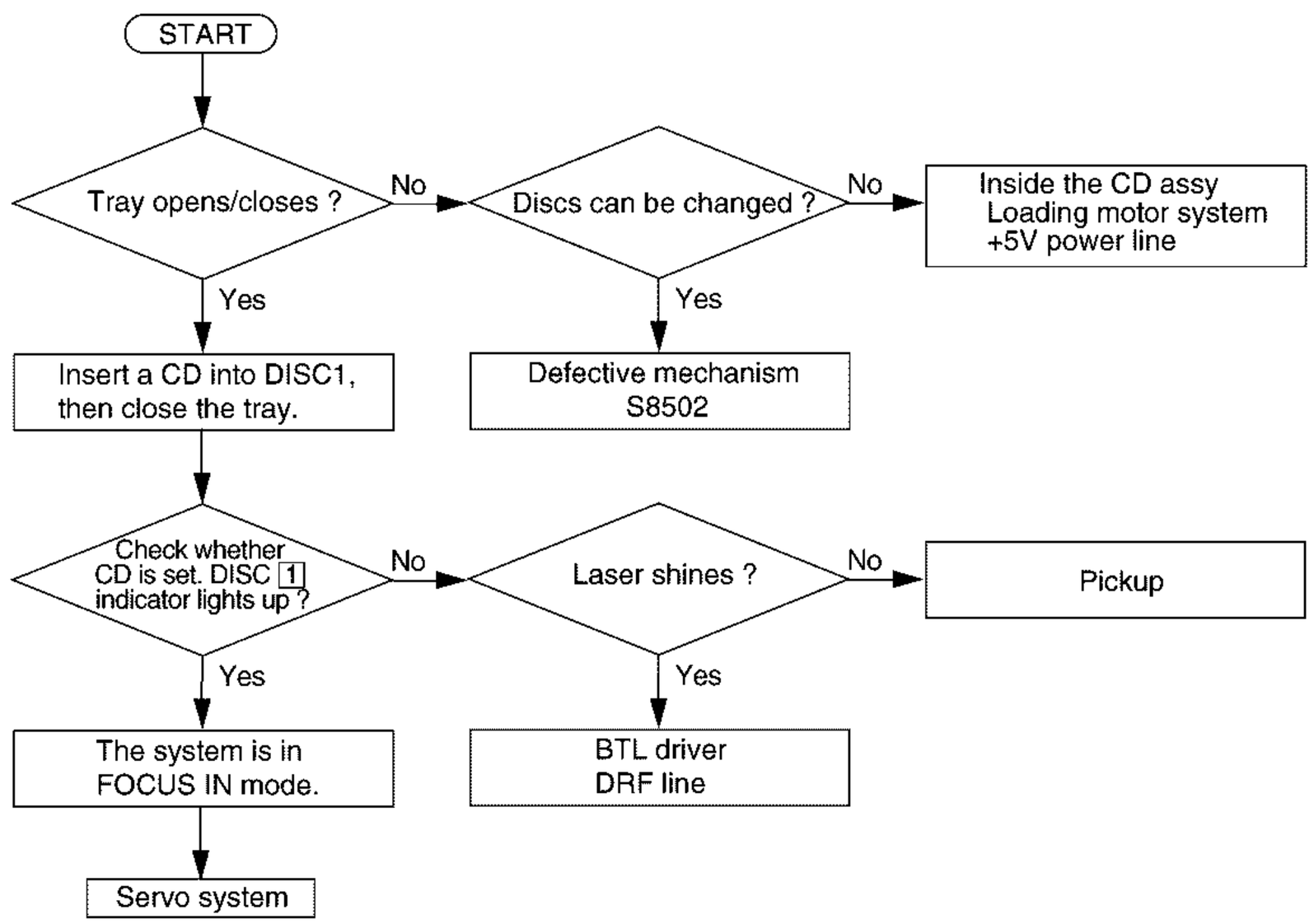
■ The Power of The System Does Not Turn to ON. The Backlight Does Not Light Up.



■ No Sound is Output.



■ The System Does Not Playback CD.



* CN8005 of the CD Assy shows RF OUT and a tracking error. Use them for diagnosis.
No adjustment is required for the CD Assy.
Disconnect the AC plug from the outlet and reset the microprocessor every time diagnosis is made. If the system microprocessor determines a malfunction in CD, no command will be sent to the CD Assy thereafter.

■ IC1004 (ICP of 400mA) is Broken.

• The +5.6V line is short-circuited. The 40-core FFC is not inserted straight.
• The 6.8V Zener diode of the +5.6V line is short-circuited.
D1002 in the Power assy 2
D1809 in the DISPLAY assy
• If the ICP is broken after disconnecting the Power assy from AF assy, IC1001 (78M05) or its surrounding parts may be malfunctioning.
• The ICP is also broken by short circuit of IC1002 (4558).
• The ICP is also broken by B-E short circuit of Q1001 (power TR, 2SC5196/5200).

The stereo set does not operate at all if the IC1004 is broken.

■ The Power of µ-COM Does Not Switch ON. Nothing is Displayed on The LCD.

• AC power is not supplied to the AC50/60Hz line of IC1901.
• Zener D1902 in the LCD assy is short-circuited because the headphone parallel jumper is inserted incorrectly (incorrect direction).
• Is +5.6V supplied?
• Is $\overline{\text{XRESET}}$ set to "H"? Is resetting completed?

■ If Mica Sheet for The Power Transformer is not Installed ?

• Set IC1003 to open.

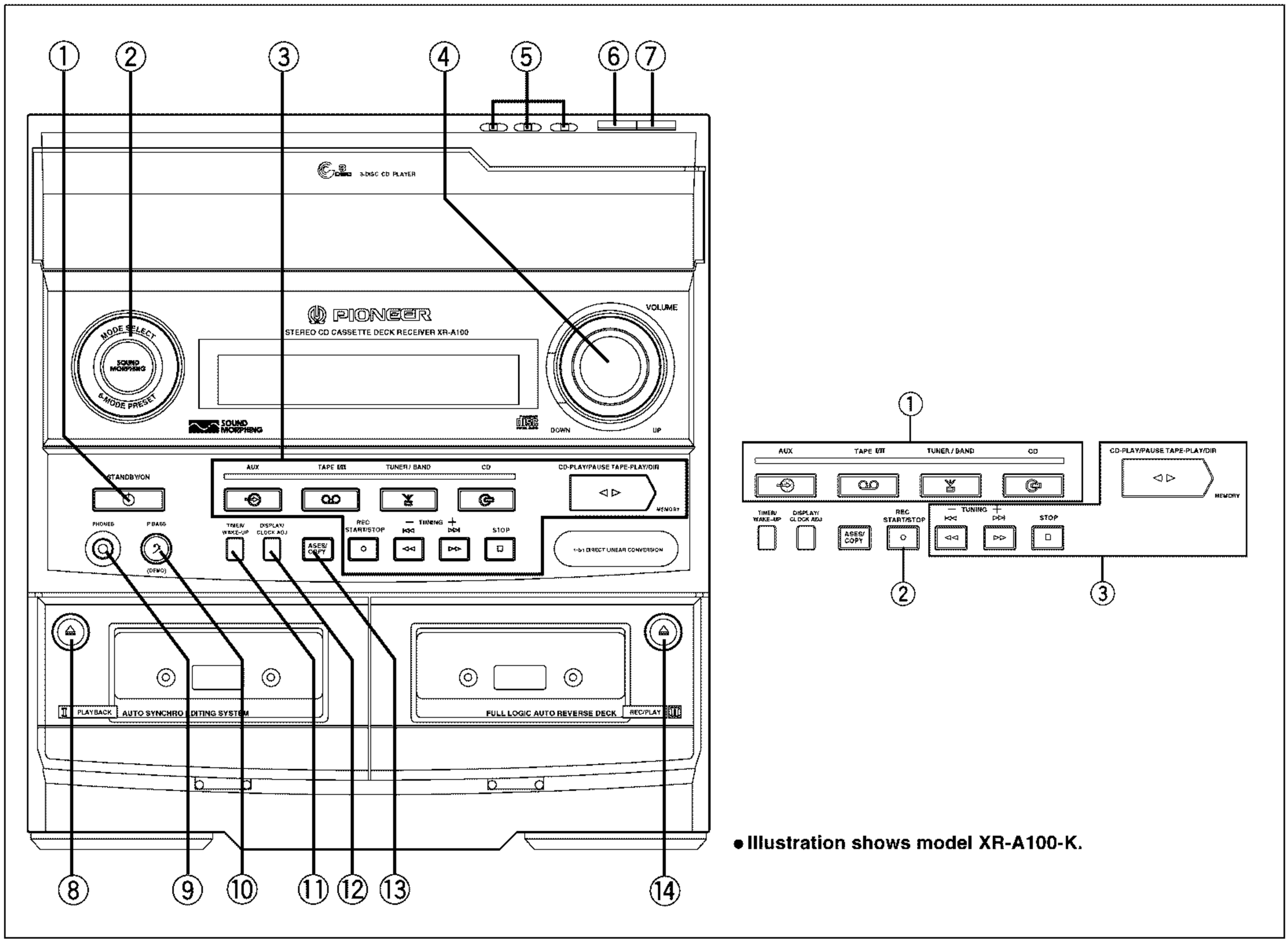
NOTE Mica Sheet is placed higher than the heat-sink bracket. Thus, whether Mica Sheet is installed or not can be checked without removing the bracket.

■ Cannot Change from +17V.

• If +5.6V (for µ-COM) correctly output? → Correct the 5.6V system.
• Is 5.6V supplied to Pin 6 of IC1002 (4558)? This IC is Vref of +17V.
• Check the voltage of Pin7 of IC1002 (4558).
Cannot be changed from the Pin 8 side. → Short circuit in Q1001, Q1002, D1008, or Q1008
Cannot be changed form the Pin 4 side. → Q1001, Q1002, D1008, R1018, or Q1008 is open.
Check whether UNREG voltage is supplied.
Otherwise, IC1002 is malfunctioning.
• If Vp is dislocated extremely, the microprocessor gives instruction to the system to enter standby mode. Error code E.2 lights up.
If this is troublesome, leave ST-BY of CN1302 open so that +17V is maintained during standby mode.

8. PANEL FACILITIES AND SPECIFICATIONS

■ PANEL FACILITIES



● Illustration shows model XR-A100-K.

① STANDBY/ON button

② SOUND MORPHING MODE button (XR-A100-K)
S.M. (SOUND MORPHING) JOG (XR-A200)

③ Function buttons section

④ VOLUME control

⑤ DISC select buttons (1 – 3)

⑥ DISC CHANGE button

⑦ CD OPEN/CLOSE button

⑧ DECK I EJECT (⏏)

⑨ Headphones jack (PHONES)

⑩ P.BASS (DEMO) button

⑪ TIMER/WAKE-UP button

⑫ DISPLAY/CLOCK ADJ button

⑬ ASES/COPY button

⑭ DECK II EJECT (⏏)

Function buttons section

① FUNCTION buttons

② REC START/STOP button

③ Common operation buttons

● The roles of the buttons vary depending on the input functions.

During CD input:

◄ ► : Play/Pause
■ : Stop
►►/►►| : Fast forward/Track search
◄◄/|◄◄ : Fast reverse/Track search

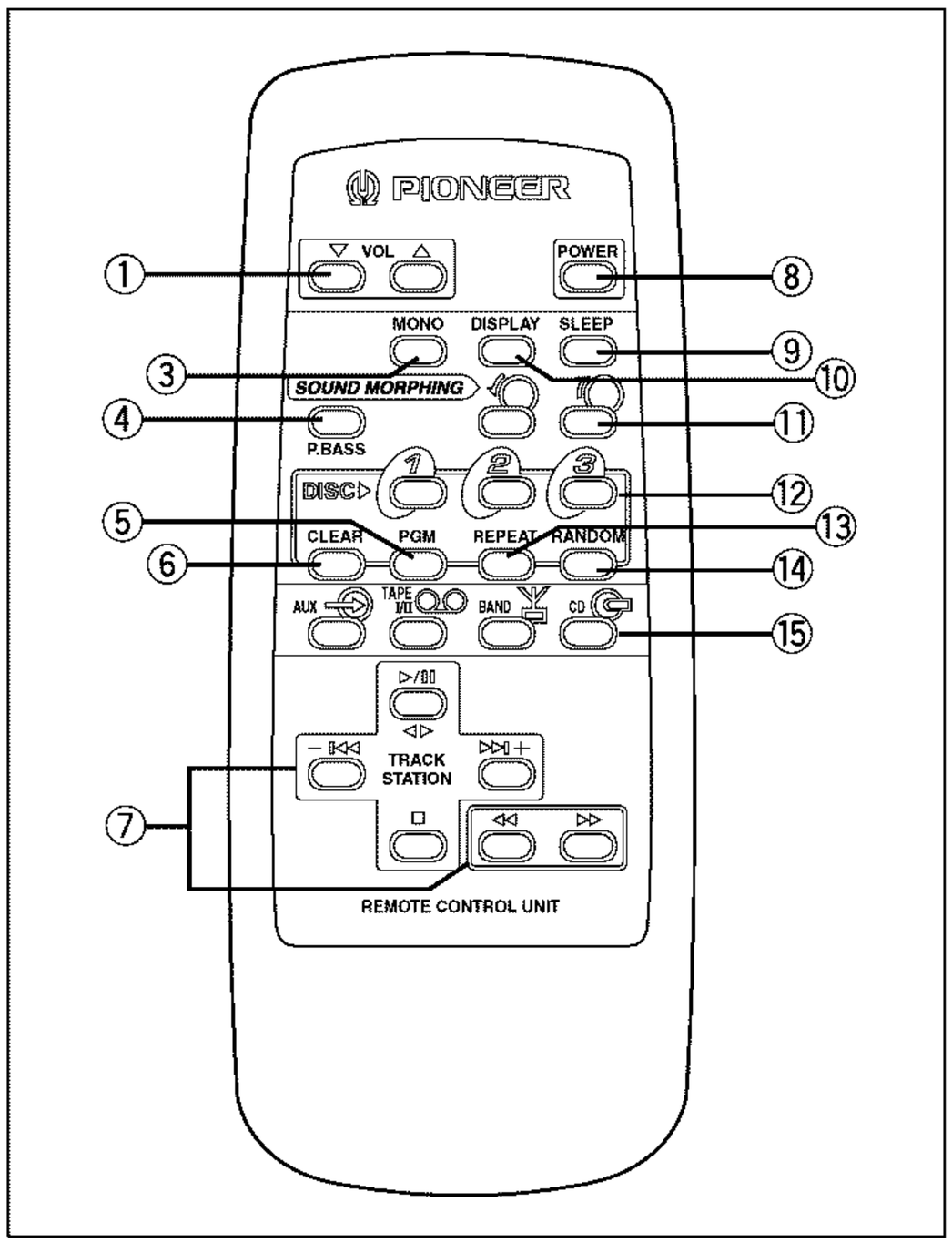
During cassette deck input:

◄ ► : Play/Tape transport direction
■ : Stop
►► : Fast forward
◄◄ : Rewind
►►| : Music search + (XR-A200 only)
|◄◄ : Music search – (XR-A200 only)

During tuner input:

◄ ► : Station memory
– : Frequency & Station down
+ : Frequency & Station up

Remote control unit



① **VOLUME buttons**

③ **MONO button**

④ **P.BASS button**

⑤ **PGM button**

⑥ **CLEAR button**

⑦ **Common operation buttons**

The roles of the buttons vary depending on the input functions.

During CD input:

- ►/II : Play/Pause
- ■ : Stop
- ►►I : Track search
- I◄◄ : Track search
- ►► : Fast forward
- ◄◄ : Fast reverse

During cassette deck input:

- ◄ ► : Play/Tape transport direction
- ■ : Stop
- ►►I : Music search + (XR-A200 only)
- I◄◄ : Music search – (XR-A200 only)
- ►► : Fast forward
- ◄◄ : Rewind

During tuner input:

- ►►I : Station up
- I◄◄ : Station down
- ►► : Frequency up
- ◄◄ : Frequency down

⑧ **POWER button**

⑨ **SLEEP button**

⑩ **DISPLAY button**

⑪ **SOUND MORPHING buttons**

⑫ **DISC select buttons**

⑬ **REPEAT button**

⑭ **RANDOM button**

⑮ **FUNCTION buttons**

■ SPECIFICATIONS

STEREO CD CASSETTE DECK RECEIVER

XR-A100-K, XR-A200

Amplifier Section

Continuous Average Power Output is 40 Watts* per channel, min., at 6 ohms from 60 Hertz to 15,000 Hertz, with no more than 5% total harmonic distorsion.**

Continuous power output (RMS)
XR-A100-K ..... 50 W + 50 W (1 kHz, T.H.D. 10 %, 6 Ω)
XR-A200 ..... 50 W + 50 W (1 kHz, T.H.D. 10 %, 6 Ω)

* Measured pursuant to the Federal Trade Commission's Trade Regulation rules on Power Output Claims for Amplifiers.
** Measured by Audio Spectrum Analyzer.

FM/AM Tuner Section
FM Tuner Section
Frequency Range ..... 87.5 MHz to 108 MHz
Antenna Input ..... 75 Ω unbalanced

AM Tuner Section
Frequency Range
With 9 kHz step ..... 531 kHz to 1,602 kHz
With 10 kHz step ..... 530 kHz to 1,700 kHz
Antenna ..... Loop antenna

CD Section
Type ..... Compact disc digital audio system
Wow and Flutter ..... Limit of measurement (±0.001% W.PEAK) or less (EIAJ)

Cassette Deck Section
Systems ..... 4-track, 2-channel stereo
Heads ..... Recording/playback head x 1
Playback head x 1
Erasing head x 1
Motor ..... DC servo motor x 1
Tape type ..... TYPE I (Normal) tape

Miscellaneous
Power Requirements ..... AC 120 V, 60 Hz
Power Consumption ..... 136 W (185VA)
Dimensions ..... 270 (W) x 300 (H) x 324 (D) mm
10-5/8 (W) × 11-13/16 (H) × 12-3/4 (D) in.
Weight (without package) ..... 6.9 kg (15 lb 4 oz)

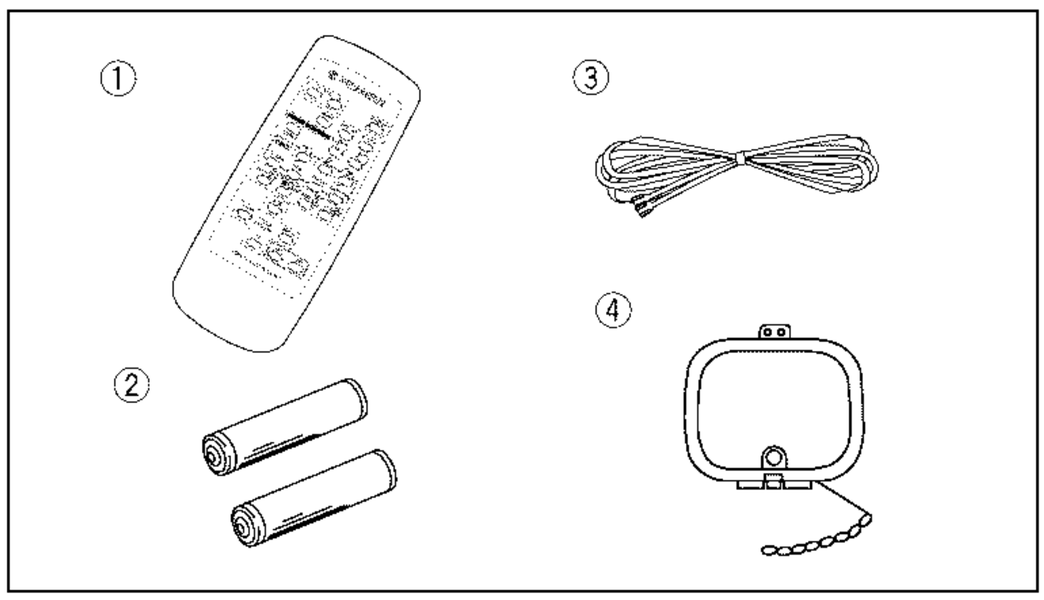
Accessories
Operating Instructions 1
Remote Control Unit 1
Dry Cell Batteries (AA/R6P) 2
FM Antenna 1
AM Loop Antenna 1

NOTE:
Specifications and design are subject to possible modifications without notice, due to improvements.

POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

● ACCESSORIES



① Remote control unit x 1 : XZN3002 (CU-XR040)
② AA/R6P dry cell batteries x 2
③ FM antenna x 1 : ADH7004
④ AM loop antenna x 1 : XTB3001